

**EXHIBIT 105-B**  
**Redacted Version of**  
**Document Sought to be Sealed**

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

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IN RE: FACEBOOK, INC.,  
CONSUMER PRIVACY USER  
PROFILE LITIGATION

\_\_\_\_\_ /

MDL No. 2843

Case No. 18-md-02843-VC-JSC

This document relates to:

ALL ACTIONS

\_\_\_\_\_ /

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REMOTE VIDEOTAPED DEPOSITION OF  
SIMON CROSS  
30(B)(6) DESIGNEE, FACEBOOK, INC.

\_\_\_\_\_

MONDAY, MAY 9, 2022

REPORTED BY: HOLLY THUMAN, CSR No. 6834, RMR, CRR  
JOB NUMBER 5210141

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Remote videotaped deposition of SIMON CROSS, taken by the Plaintiffs, with the witness located in London, United Kingdom, commencing at 3:49 P.M. London Daylight Time, on MONDAY, MAY 9, 2022, before me, HOLLY THUMAN, CSR, RMR, CRR.

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APPEARANCES

(ALL APPEARANCES REMOTE)

FOR THE PLAINTIFFS:

KELLER ROHRBACK LLP

1201 Third Avenue, Suite 3200

Seattle, Washington 98101

By: CARI LAUFENBERG, Attorney at Law

CLaufenberg@kellerrohrback.com

By: ADELE DANIEL, Attorney at Law

ADaniel@kellerrohrback.com

By: DEREK W. LOESER, Attorney at Law

DLoeser@kellerrohrback.com

By: EMMA WRIGHT

EWright@kellerrohrback.com

By: DAVID KO, Attorney at Law

DKo@kellerrohrback.com

BLEICHMAR FONTI & AULD

555 12th Street, Suite 1600

Oakland, California 94607

By: LESLEY E. WEAVER, Attorney at Law

lweaver@bfalaw.com

By: MATTHEW MELAMED, Attorney at Law

mmelamed@bfalaw.com

(CONTINUED)

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APPEARANCES (Continued)  
(ALL APPEARANCES REMOTE)

FOR DEFENDANT FACEBOOK, INC.:

GIBSON, DUNN & CRUTCHER  
1801 California Street, Suite 4200  
Denver, Colorado 80220  
By: ROBERT BLUME, Attorney at Law  
RBlume@gibsondunn.com

GIBSON, DUNN & CRUTCHER  
1881 Page Mill Road  
Palo Alto, California  
By: PHUNTISO WANGDRA, Attorney at Law  
PWangdra@gibsondunn.com

GIBSON DUNN & CRUTCHER LLP  
2001 Ross Avenue, Suite 2100  
Dallas, Texas 75210-2911  
By: MATT BUONGIORNO, Attorney at Law  
MBuongiorno@gibsondunn.com  
By: HANNAH REGAN-SMITH, Attorney at Law  
HRegan-Smith@gibsondunn.com

GIBSON DUNN & CRUTCHER LLP  
811 Main Street, Suite 3000  
Houston, Texas 77002  
By: JOSIAH CLARKE, Attorney at Law  
JClarke@gibsondunn.com

ALSO PRESENT:

IAN CHEN, In-House Counsel, Meta Platforms

ROSE RING, In-House Counsel, Meta Platforms

JOHN MACDONELL, Videographer

DANIEL GARRIE, Special Master



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## I N D E X

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1 MONDAY, MAY 9, 2022

2 3:49 P.M.

3 --o0o--

4 PROCEEDINGS

5 --o0o--

6 THE VIDEO OPERATOR: We're on the record. 15:49:21

7 It's 3:49 P.M. London time on May 9, 2022. This is 15:49:22

8 the deposition of Simon Cross, and we're here in 15:49:29

9 the matter of Facebook Consumer Privacy User 15:49:32

10 Profile Litigation. 15:49:35

11 I'm John MacDonell, the videographer, with 15:49:39

12 Veritext. 15:49:42

13 Before the reporter swears the witness, 15:49:43

14 would Counsel please identify themselves, beginning 15:49:45

15 with the noticing party, please. 15:49:48

16 MR. LOESER: Good morning. This is 15:49:51

17 Derek Loeser from Keller Rohrbach for Plaintiffs. 15:49:52

18 With me is Adele Daniel and Cari Laufenberg and 15:49:56

19 Emma Wright, also from Keller Rohrbach. 15:50:00

20 MR. BLUME: This is Rob Blume from 15:50:03

21 Gibson Dunn on behalf of Facebook. With me is 15:50:05

22 Hannah Regan-Smith, Ian Chen, Josiah Clarke, 15:50:08

23 Matt Buongiorno, and Phuntso Wangdra. 15:50:17

24 MS. WEAVER: And good morning. It's 15:50:23

25 Lesley Weaver from Bleichmar Fonti & Auld, also on 15:50:24

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1 Q. And do you recall what those matters were 15:51:30  
2 in which you were deposed? 15:51:32

3 A. The first was some -- a matter relating to 15:51:34  
4 '643, the '643 case, and then the second was a -- I 15:51:38  
5 don't recall exactly, but it's the -- the 15:51:45  
6 Washington District Attorney's -- Washington D.C., 15:51:48  
7 I think, case against -- against Meta relating to 15:51:52  
8 some of the matters -- 15:51:56

9 (Reporter requested clarification.) 15:52:04

10 THE WITNESS: -- relating to the, I 15:52:04  
11 recall, the Cambridge Analytica matter. 15:52:05

12 BY MR. LOESER: 15:52:08

13 Q. And the '643 matter was against Facebook 15:52:10  
14 as well. Is that right? 15:52:13

15 A. That's correct, yes. 15:52:16

16 Q. Okay. Well, you've been through this 15:52:18  
17 before, so -- but I'll just remind you of the basic 15:52:20  
18 rules, which are really designed to have a clear 15:52:23  
19 record. 15:52:26

20 As the Special Master indicated, it's very 15:52:26  
21 important that we're not talking at the same time 15:52:28  
22 and that we let the court reporter take down what 15:52:30  
23 we are saying. 15:52:32

24 If I ask a question and you don't 15:52:33  
25 understand the question, could you please ask me to 15:52:35

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1 restate it, and I'll attempt to do that. 15:52:38

2 And when you're answering questions, it's 15:52:42

3 important to answer verbally, so that would be a 15:52:44

4 good example. Shaking your head doesn't make it 15:52:47

5 onto the record, but Yes/No does. 15:52:50

6 So could we make sure that you answer 15:52:52

7 verbally? 15:52:54

8 A. I understand. 15:52:55

9 Q. And if you do answer one of my questions, 15:52:56

10 I will assume you understood the question. 15:52:59

11 Is that a fair assumption? 15:53:01

12 A. That's fine, yes. 15:53:04

13 Q. And over the course of the day, your 15:53:06

14 attorney may object to questions that I ask. And 15:53:10

15 when he does so, unless he instructs you not to 15:53:12

16 answer the question, please wait for him to finish 15:53:15

17 objecting and then go ahead and answer the 15:53:17

18 question. 15:53:19

19 Do you understand that? 15:53:20

20 A. I understand that, yes. 15:53:21

21 Q. And we'll be going for a while, and if at 15:53:23

22 any point you need a break, please just ask for 15:53:26

23 one, and I will accommodate that the best I can. 15:53:28

24 The only caveat is if there is a question 15:53:31

25 that is pending, I will ask you to finish the 15:53:35

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1 question before we take a break. 15:53:37

2 Is that understood? 15:53:40

3 A. Yeah. I understand. 15:53:41

4 Q. And sometimes if we're -- if there's a 15:53:42

5 series of questions and I'm almost through the 15:53:44

6 series, I'll ask if it's okay if we just finish the 15:53:46

7 series before taking a break. 15:53:49

8 Does that sound fair to you? 15:53:51

9 A. That sounds fair. 15:53:53

10 Q. Okay. And as the Special Master 15:53:54

11 indicated, he will be observing today, and so he 15:53:55

12 may come on camera at some point to discuss 15:53:58

13 matters. 15:54:01

14 And it's important there as well that we 15:54:01

15 make sure that he has the time and space to talk 15:54:03

16 and that the record is clear so that we're not 15:54:06

17 talking at the same time. 15:54:08

18 Is that fair? 15:54:09

19 A. Yep. That's fair. 15:54:10

20 Q. Okay. And, Mr. Cross, is there anything 15:54:12

21 that may impact your ability to testify honestly 15:54:14

22 and truthfully today? 15:54:18

23 A. Not that I'm aware of. 15:54:20

24 Q. Okay. No medications or anything of that 15:54:22

25 sort that may interfere with your recall or ability 15:54:24

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1 to testify? 15:54:29

2 A. No. I'm not on any medication, no. 15:54:29

3 Q. And, Mr. Cross, you're located in London? 15:54:32

4 A. That's correct. 15:54:36

5 Q. And is that where you -- and I gather you 15:54:37

6 work for -- for Meta. Right? 15:54:40

7 A. That's correct, yeah. I still work for 15:54:44

8 Meta and live in London. 15:54:46

9 Q. Okay. And so how often do you come to the 15:54:52

10 United States as part of your work? 15:54:54

11 A. In the last two years, not at all, sadly. 15:54:56

12 Before that, I used to come several times a year. 15:55:02

13 Q. Okay. And do you think that going forward 15:55:06

14 you'll be coming stateside more often? 15:55:08

15 A. It's too early to say how much -- how much 15:55:13

16 international we'll be doing. I doubt I'll be 15:55:15

17 doing it as much as we used to. 15:55:18

18 Q. And, sir, if there were a trial in this 15:55:20

19 case, would you be willing to fly across the ocean 15:55:22

20 to attend the trial? 15:55:25

21 A. I have to consult with my counsel on 15:55:29

22 whether or not that would be an appropriate thing 15:55:32

23 to do. 15:55:34

24 Q. Okay. And are you communicating -- and 15:55:35

25 this is -- you know, we're in this new world of 15:55:39

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1 remote depositions, so there are some things we 15:55:41  
2 need to sort out for that as well. 15:55:43  
3 You are not actively communicating with 15:55:46  
4 anybody during the time that I'm asking you these 15:55:47  
5 questions, are you? 15:55:50  
6 A. No. I am not communicating with anyone. 15:55:51  
7 Q. Okay. No texting or messaging or anything 15:55:54  
8 of that sort happening? 15:55:57  
9 A. No. My phone is screen side down on the 15:55:59  
10 desk, and I've cleared my computer. 15:56:02  
11 Q. Excellent. Thank you. 15:56:07  
12 And, Mr. Cross, did you prepare any notes 15:56:09  
13 or other materials to assist you with your 15:56:12  
14 testimony today? 15:56:14  
15 A. I have a document that I prepared that 15:56:17  
16 includes some facts to help me answer -- I think 15:56:20  
17 that might come up to help me answer your 15:56:25  
18 questions, but that's all I've prepared. 15:56:27  
19 Q. And do you have that with you today, sir? 15:56:31  
20 A. I do, yes. 15:56:33  
21 Q. And do you intend to refer to that during 15:56:35  
22 your testimony today? 15:56:39  
23 A. If -- if you ask me a question and I can't 15:56:42  
24 remember a fact -- a specific fact I may have noted 15:56:44  
25 down, then I was planning to refer to that, yes, as 15:56:50

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1 to best answer your questions. 15:56:54

2 MR. LOESER: Thank you. 15:56:57

3 And, Counsel, Mr. Blume, we would like a 15:56:57

4 copy of those notes. And we don't need to go off 15:57:00

5 the record right now to get them, but we would like 15:57:03

6 them as soon as you can get them to us during the 15:57:06

7 deposition, not after. 15:57:08

8 Could you accommodate that request, 15:57:10

9 please? 15:57:13

10 MR. BLUME: Noted. 15:57:14

11 BY MR. LOESER: 15:57:19

12 Q. And since your counsel noted that request 15:57:19

13 but did not actually tell me he was going to do it, 15:57:21

14 this is something I'll bring up again in a little 15:57:24

15 bit just to make sure we actually get those notes 15:57:27

16 during the deposition today. Okay? 15:57:30

17 And, Mr. Cross, you indicated that you 15:57:33

18 currently work for Meta. Is that right? 15:57:35

19 A. That's correct. I work for Meta -- the 15:57:41

20 U.K. arm of Meta. Meta Platforms, Inc., has a U.K. 15:57:44

21 arm. 15:57:50

22 Q. Okay. And over the course of the day, 15:57:51

23 I'll be referring to Facebook frequently. And when 15:57:53

24 I refer to Facebook and ask you a question about 15:57:55

25 Facebook, will you be drawing any distinction 15:57:58

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25	Did you speak to colleagues of yours about	16:00:50
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1 your testimony today? 16:00:53

2 A. I spoke to some people currently employed 16:00:55

3 by Meta to understand their experiences relating to 16:00:57

4 this matter, yes. 16:01:05

5 Q. And who did you speak with? 16:01:07

6 A. I spoke with Eddie O'Neil, Ime Archibong, 16:01:11

7 Steven Elia, Dan Xu, Allison Hendrix, Eugene 16:01:18

8 Zarakhovsky, Francisco Varela, and Amit Sangani. 16:01:25

9 Q. And were those conversations all of 16:01:34

10 different amounts of time? 16:01:37

11 Were there some people you spoke to more 16:01:38

12 than others? 16:01:40

13 Describe in a little more detail, if you 16:01:41

14 can. 16:01:43

15 A. I spoke to each of those people once for 16:01:45

16 between 30 and 45 minutes each. The conversation 16:01:51

17 between Dan and Steven was one conversation with 16:01:57

18 both of them on the call. 16:02:01

19 Q. And were any attorneys present during any 16:02:09

20 of those conversations? 16:02:11

21 A. Yes. Attorneys for Facebook/Meta, were 16:02:14

22 present for all of those conversations, yes. 16:02:18

23 Q. Okay. And who were the attorneys that 16:02:22

24 were present, if you know their names? 16:02:23

25 A. There were a number of people on the call, 16:02:29

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1       so I probably can't give you everybody who was       16:02:30  
2       there, but a combination of Rob -- Mr. Blume,       16:02:34  
3       Ian Chen, and Matt -- I'm not sure I'm going to       16:02:41  
4       pronounce this correctly -- Buongiorno.       16:02:49  
5               Sorry, Matt, if you're listening. I       16:02:52  
6       apologize if I got that wrong.       16:02:55  
7               Q. Thank you. Good enough to identify him.       16:02:59  
8               And, sir, did you review any of the       16:03:01  
9       pleadings or filings that have been made in this       16:03:03  
10      case to prepare for your testimony today?       16:03:06  
11              A. I have, yes.       16:03:09  
12              Q. And do you recall what specifically you       16:03:11  
13      reviewed?       16:03:13  
14              A. My attorneys sent over a -- a set of       16:03:16  
15      documents for me to review in advance of this       16:03:21  
16      testimony, and I also received a set of documents,       16:03:25  
17      I think, from you folks; around 36 documents, I       16:03:28  
18      think.       16:03:34  
19              Q. And were you sent a stack of documents       16:03:34  
20      from your attorneys?       16:03:36  
21              Were they assembled in a binder or       16:03:38  
22      presented to you in some other manner like that?       16:03:40  
23              A. All of the documents I've reviewed to       16:03:43  
24      prepare for today I've reviewed electronically.       16:03:46  
25              Q. Okay. In a single folder?       16:03:50

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1                   Were they delivered in a single folder, or                   16:03:53  
2                   was it a series of separate files?                   16:03:55  
3                   A. I received a link to a Google Drive folder                   16:03:58  
4                   that contained a number of files.                   16:04:02  
5                   Q. Thank you.                   16:04:04  
6                   MR. LOESER: And, Counsel, as you know,                   16:04:08  
7                   we've asked for Facebook to provide us with                   16:04:09  
8                   identification of the materials given to the                   16:04:11  
9                   witness to prepare for his testimony, and we would,                   16:04:13  
10                  again, ask that you do that with respect to this                   16:04:15  
11                  deposition.                   16:04:18  
12                  (Reporter requested clarification.)                   16:04:18  
13                  MR. BLUME: I understood the request.                   16:04:25  
14                  BY MR. LOESER:                   16:04:28  
15                  Q. And, Mr. Cross, you also indicated that                   16:04:29  
16                  you reviewed some materials that you believe that                   16:04:31  
17                  the plaintiffs sent over to you. Is that correct?                   16:04:33  
18                  A. Yes. That's my understanding. There was                   16:04:37  
19                  a set of documents that was sent over for me to                   16:04:41  
20                  read in advance of today's testimony.                   16:04:46  
21                  Q. And did you review those documents?                   16:04:49  
22                  A. I did review those documents, yes.                   16:04:54  
23                  Q. And how long would you say you spent                   16:05:00  
24                  reviewing the documents that were delivered to you                   16:05:03  
25                  from the plaintiffs?                   16:05:05

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1           A.   On the order of eight to ten hours or so.           16:05:12

2           Q.   Good.   Thank you.           16:05:20

3                   And were those all documents that you had           16:05:21

4           seen before, or were there some new things in there           16:05:23

5           for you?           16:05:26

6           A.   That list contained documents that I           16:05:29

7           hadn't seen before.           16:05:30

8           Q.   Including documents that were -- that were           16:05:33

9           produced by Facebook in this case.           16:05:36

10                   Let me ask that slightly differently.           16:05:40

11                   Including documents that were internal           16:05:42

12           correspondence and other materials that were           16:05:43

13           created by Facebook?           16:05:45

14           A.   That's my understanding, yes.           16:05:48

15                   MR. LOESER:   So if we could mark --           16:05:55

16           actually, we don't need to mark.   If we could show           16:05:56

17           Mr. Cross what has been previously marked           16:06:00

18           Exhibit 330, I believe.           16:06:02

19                   (Previously marked Exhibit 330 was           16:06:03

20           presented to the witness.)           16:06:03

21           BY MR. LOESER:           16:06:04

22           Q.   This should come up on your screen.           16:06:04

23           Again, we're at the mercy of the great Internet           16:06:07

24           here, but you will see the deposition notice that's           16:06:10

25           been served in this case by the plaintiffs on           16:06:13

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1 Facebook. 16:06:16

2 Let me know when you can see that 16:06:17

3 document. 16:06:19

4 MR. BLUME: I believe that's Exhibit 332. 16:06:26

5 MR. LOESER: We have it as Exhibit 330. 16:06:29

6 Prior Exhibit 330, yeah. This isn't a new exhibit, 16:06:34

7 Rob, sorry. This is -- it was marked during 16:06:38

8 Ms. Hendrix's deposition. I'll try and make 16:06:40

9 that -- 16:06:43

10 MR. BLUME: On the screen that I'm looking 16:06:44

11 at, it says "332" on the exhibit sticker. 16:06:45

12 MR. LOESER: Refresh your screen. My 16:06:52

13 technology expert tells me that you need to refresh 16:06:55

14 your screen. 16:06:58

15 It should be corrected now. 16:07:05

16 MR. BLUME: Yes, with thanks to your 16:07:08

17 technology expert. Appreciate it. 16:07:09

18 BY MR. LOESER: 16:07:12

19 Q. So, Mr. Cross, you're looking at what's 16:07:12

20 called "Plaintiff's Second Amended Notice of 16:07:16

21 Deposition of Defendant Facebook, Inc., Pursuant to 16:07:18

22 Federal Rule of Civil Procedure 30(b)(6)." 16:07:20

23 Have you seen this notice before? 16:07:25

24 A. Yes. 16:07:29

25 Q. And you understand that you have been 16:07:31



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1 designated to testify as to certain topics in 16:07:33  
2 response to this notice. 16:07:36

3 A. That's my understanding, yes. 16:07:40

4 Q. Okay. And if you could turn -- attached 16:07:42  
5 to the notice, there is an appendix. And if you 16:07:45  
6 turn all the way to page 13, or click through to 16:07:48  
7 that page or whatever you would need to do on your 16:07:51  
8 screen. I'm turning to page 13, but ... 16:07:54

9 A. I have page 13 in front of me. 16:08:02

10 Q. Okay. And on page 13, there are three 16:08:04  
11 topics. The bottom two, there's Topic 6 and 16:08:07  
12 Topic 7. 16:08:13

13 Do you see that? 16:08:14

14 A. I see that. 16:08:14

15 Q. And is it your understanding that you have 16:08:15  
16 been designated to testify on behalf of Facebook 16:08:17  
17 with regard to Topics 6 and 7? 16:08:23

18 A. That's correct. 16:08:27

19 Q. Okay. And as we get into these topics in 16:08:28  
20 more detail, your counsel will probably want to 16:08:31  
21 clarify the -- the particular matters within those 16:08:34  
22 paragraphs that you are prepared to testify about, 16:08:37  
23 but we can get to that later. 16:08:40

24 But for present purposes, what's important 16:08:43  
25 is that these are the two topics that you 16:08:46

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1 understand that you are here to testify about. 16:08:48

2 A. Those are the two topics I understand I'm 16:08:53

3 here to testify about. 16:08:55

4 Q. And do you understand that by being 16:08:58

5 designated to testify about these topics, you are 16:09:00

6 authorized to speak for Meta/Facebook on the 16:09:04

7 specified matters? 16:09:08

8 A. That's -- that's my understanding, yes. 16:09:11

9 Q. And you understand that your testimony, 16:09:14

10 which is under oath, is binding on Meta. 16:09:15

11 A. That's my understanding, yes. 16:09:20

12 Q. Okay. And I'm going to use Meta and 16:09:22

13 Facebook interchangeably here. I mean the same 16:09:24

14 thing every time, and, like you said before, if 16:09:26

15 there's a distinction that needs to be drawn, you 16:09:29

16 are going to draw that for me. 16:09:32

17 A. I will ask for clarification where I think 16:09:33

18 one is needed if the entities need to be 16:09:36

19 distinguished, yes. 16:09:38

20 Q. And, sir, do you understand that the time 16:09:40

21 period at issue in this litigation is 2007 to the 16:09:42

22 present? 16:09:46

23 A. That's my understanding, yes. 16:09:48

24 Q. Okay. So all of my questions will concern 16:09:50

25 that time period unless I specify something 16:09:53

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1 narrower. 16:09:55

2 Is that fair? 16:09:56

3 A. That's fair. 16:09:57

4 Q. So before we get into the specifics of 16:10:06

5 each of these topics, I think it would be important 16:10:08

6 to have a conversation about basic terminology to 16:10:10

7 make sure that when you testify, the record is 16:10:13

8 clear as to what you're saying. 16:10:14

9 Is that fair? 16:10:16

10 A. I'm happy to make sure we can align on 16:10:18

11 terminology, yes. 16:10:22

12 Q. Okay. Some of it will seem very basic to 16:10:23

13 you, but trust me, it's important for the court and 16:10:25

14 for the record and, if there's a jury in this case, 16:10:27

15 for the jury to understand and hear from Facebook 16:10:30

16 what these terms mean. 16:10:33

17 So if you'll bear with me, I'll run 16:10:34

18 through some of these basic concepts. 16:10:36

19 To start, what is an "app"? 16:10:39

20 A. An app is an entity in Facebook's systems 16:10:43

21 that has the ability to access information via the 16:10:53

22 Graph API. 16:11:00

23 There was a broader definition of "app" 16:11:01

24 that is pursuant to mobile applications and so on, 16:11:05

25 but an app in the Facebook ecosystem is a -- an 16:11:08

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1       entity that -- that has an app ID and can access       16:11:13

2       the Graph API in some way.       16:11:18

3             Q.   And there are third-party apps and       16:11:22

4       Facebook apps.   Correct?       16:11:24

5             A.   Can you help me understand what you mean       16:11:28

6       by "third-party apps"?       16:11:29

7             Q.   Yeah.   I'm glad you asked.       16:11:31

8                 So Facebook creates apps itself for the       16:11:34

9       platform.   Right?       16:11:36

10            A.   There are some apps that Facebook       16:11:41

11       engineers, Facebook, Inc., would have built that       16:11:45

12       may call the Platform APIs, yes.       16:11:49

13            Q.   And then there are -- I'll call them       16:11:54

14       "third parties," but entities not owned or       16:11:57

15       affiliated with Facebook that also create apps.       16:11:59

16            A.   The Facebook Platform allowed developers       16:12:04

17       to create -- third parties to create applications       16:12:07

18       on the Facebook Platform, yes.       16:12:10

19            Q.   Okay.   And so over the course of our       16:12:12

20       conversation today, when I refer to "third-party       16:12:14

21       apps," that is what I will be referring to.       16:12:16

22                 Is that fair?       16:12:19

23            A.   So to be clear, you're referring to a       16:12:20

24       third party that, in this context, is an       16:12:23

25       application developed by an entity other than       16:12:28

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1 Facebook, Inc., or Meta Platforms? 16:12:31

2 Q. Yes. Thank you. That's a good 16:12:36

3 clarification. 16:12:38

4 And you used some other terms in your 16:12:39

5 answer, and I guess we may as well define those as 16:12:42

6 well. 16:12:46

7 What is the "Facebook Platform"? 16:12:46

8 A. The Facebook Platform is a collection of 16:12:50

9 technologies that enable developers to build 16:12:57

10 applications that could interact with the Facebook 16:13:01

11 product, Facebook.com or the Facebook product as 16:13:08

12 a -- as a regular user would think of it. 16:13:14

13 Q. And help me understand: What is the 16:13:19

14 "Facebook product"? 16:13:21

15 A. So the Facebook product, by that, I'm 16:13:25

16 referring to, you know, the website Facebook.com 16:13:28

17 and the Facebook iOS and Android apps, for example, 16:13:32

18 and the experience you have when using the 16:13:39

19 Facebook.com website or the Facebook mobile apps on 16:13:43

20 iOS and Android. 16:13:48

21 Q. Thank you for that. 16:13:52

22 And, sir, what is the "Facebook 16:13:54

23 Social Graph"? 16:13:55

24 A. My understanding is that the Social Graph 16:13:57

25 would be a term used to explain the relationships 16:13:59

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1 Q. And why is that? What is the type of 16:15:41  
2 information that would be considered more sensitive 16:15:43  
3 in that context? 16:15:46  
4 A. So it depends on the definition of 16:15:48  
5 "sensitive." 16:15:52  
6 Can you help me understand what you mean 16:15:52  
7 by "sensitive"? 16:15:54  
8 Q. Yes. I mean about the Facebook user data 16:15:55  
9 and information that is accessed via an API. 16:15:57  
10 Are there some APIs that have the ability 16:16:01  
11 to access what Facebook has considered more 16:16:03  
12 sensitive information about its users? 16:16:07  
13 A. So good example of a -- of an API that I 16:16:11  
14 think is -- would be considered sensitive is an API 16:16:15  
15 called "auth.log-in," which would allow a user to 16:16:19  
16 log in to a third-party application using their 16:16:26  
17 Facebook user name and password. 16:16:29  
18 And that would be considered potentially 16:16:31  
19 sensitive because the user is entering their 16:16:36  
20 Facebook user name and password into a third-party 16:16:38  
21 context. 16:16:42  
22 Q. Okay. And help me understand why that 16:16:46  
23 would be considered sensitive. 16:16:50  
24 Would that be considered highly sensitive 16:16:52  
25 in the Facebook terminology? 16:16:55

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1           A. I'm not sure what you would be referring           16:16:58  
2           to with -- by "highly sensitive." I'm not aware of           16:16:59  
3           a specific set of things that would be classed as           16:17:05  
4           "highly sensitive."           16:17:09  
5           Q. Okay. How about friends permissions           16:17:12  
6           and/or -- friend-related APIs?           16:17:16  
7           Are you familiar with friend-related APIs?           16:17:19  
8           A. Can you understand -- just represent --           16:17:23  
9           just for clarification, can you help me understand           16:17:26  
10          what you mean by "friend-related APIs"?           16:17:28  
11          Q. Sure. And we'll get into this more -- in           16:17:30  
12          more detail later as well.           16:17:33  
13          But APIs that provide access to the           16:17:35  
14          information about a Facebook user's friends, are           16:17:36  
15          those referred to by Facebook as "friends           16:17:39  
16          permissions" or "friends APIs"?           16:17:42  
17          A. There was a set of permissions that           16:17:46  
18          were -- were referred to as the friend permissions,           16:17:48  
19          yes.           16:17:52  
20          Q. And did Facebook consider those           16:17:54  
21          permissions to be sensitive?           16:17:56  
22          A. I think -- I'm not sure -- I'm not sure if           16:18:01  
23          there's a way to specifically answer that. Those           16:18:08  
24          were a set of permissions that were available at           16:18:14  
25          one time on the Platform and are no longer           16:18:16



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1 generally available. 16:18:21

2 Q. And, again, from the perspective of 16:18:24

3 Facebook, did Facebook discuss those permissions in 16:18:26

4 terms of them being sensitive or highly sensitive? 16:18:31

5 A. They were certainly discussed in the 16:18:39

6 context of being a set of permissions worth 16:18:41

7 discussing. 16:18:47

8 They may have been discussed at times as 16:18:48

9 sensitive. I'm not sure about whether or not they 16:18:51

10 were discussed as highly sensitive. There's no 16:18:53

11 official designation for those permissions that was 16:18:55

12 consistent across the company. 16:19:00

13 Q. And we're about to move on to some other 16:19:03

14 topics, but can you give me an example of a 16:19:06

15 permission that Facebook did refer to as "highly 16:19:09

16 sensitive"? 16:19:11

17 A. I can't give you an example here today of 16:19:14

18 a permission or a -- do you -- from reviewing the 16:19:16

19 documents I've reviewed, I don't recall a set of 16:19:21

20 APIs or permissions that would have been 16:19:24

21 considered -- referred to as "highly sensitive." 16:19:26

22 It's possible that they were referred to 16:19:29

23 using that term by some people, but I don't -- I 16:19:31

24 don't think there was an official designation in 16:19:35

25 any way. 16:19:38

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1                   Sorry. Official -- I'm not aware of an                   16:19:41

2                   official designation of "highly sensitive."                   16:19:44

3                   Q. And if you were asked to prepare a list of                   16:19:47

4                   everything that Facebook -- every API Facebook                   16:19:50

5                   considered sensitive or highly sensitive, who at                   16:19:54

6                   Facebook would you go talk to to get that                   16:19:57

7                   information?                   16:19:59

8                   A. There was a categorization of some APIs                   16:20:03

9                   done in, I think, 2018 to categorize APIs that were                   16:20:08

10                  still generally available that were still in                   16:20:17

11                  existence in that time against -- against a set of                   16:20:21

12                  criteria.                   16:20:27

13                  I would go speak to one of the people that                   16:20:29

14                  was involved in that project in around 2018.                   16:20:32

15                  Q. And do you know -- do you recall who those                   16:20:36

16                  people -- who was in charge of that project?                   16:20:38

17                  A. I think Konstantine -- Konstantinos -- I                   16:20:41

18                  really can't pronounce his last name.                   16:20:47

19                  "KP" as he is otherwise known --                   16:20:50

20                  Konstantinos Papamiltiadis -- I don't even want to                   16:20:52

21                  try -- was leading that project, as I understand                   16:20:55

22                  it.                   16:20:57

23                  Q. Okay. And there are some documents that                   16:20:57

24                  have his name, and I can't begin to pronounce that                   16:20:59

25                  either, so we'll just refer to him as "KP" for the                   16:21:02

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1 benefit of the court reporter. 16:21:05

2 Understood? 16:21:07

3 A. That's good. That's good with me. 16:21:08

4 Q. So there was a few other terms that you 16:21:10

5 mentioned that I want to make sure we understand 16:21:12

6 and I've used as well. 16:21:14

7 One is a "permission." 16:21:16

8 In the context of an API, what is a 16:21:18

9 "permission"? 16:21:20

10 A. In the context of -- can you help me 16:21:23

11 understand, "in the context of an API"? 16:21:26

12 Q. Or APIs generally. 16:21:32

13 A. So my understanding would be that in the 16:21:35

14 context of an API generally, a permission would 16:21:38

15 refer to a way for users -- users of the API or 16:21:42

16 consumers or integration -- integrators of the API 16:21:48

17 to determine what information was available over 16:21:52

18 that interface. 16:21:59

19 Q. And speaking specifically about the -- the 16:22:03

20 entities that were accessing information on the 16:22:07

21 Facebook Platform, does "permission" refer to the 16:22:10

22 grant of access by Facebook to APIs? 16:22:13

23 A. "Permissions" in the Facebook Platform 16:22:17

24 context refers to permissions that a user, a 16:22:22

25 Facebook user, would grant an application to which 16:22:27

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1 information the application would then have access 16:22:34

2 to after the user had given permission. 16:22:36

3 Q. And that brings me to my next question, 16:22:41

4 which is capability. 16:22:44

5 In the context of APIs, what is the 16:22:46

6 definition of "capabilities" or a "capability"? 16:22:49

7 A. Again, do you mean in the context of an 16:22:54

8 API generally, or -- 16:22:56

9 Q. Yes. 16:22:59

10 A. So in the context of an API generally, 16:23:01

11 "capability" doesn't have an industry-standard 16:23:04

12 meaning. 16:23:07

13 Q. How does Facebook generally use that term? 16:23:13

14 A. In the context -- in the context of the 16:23:18

15 Facebook Platform, "capability" refers to a set of 16:23:21

16 features that would be available to some apps on 16:23:30

17 the Facebook Platform, and that would have enabled 16:23:37

18 a range of functionality. 16:23:41

19 Q. And specifically, when talking about APIs, 16:23:44

20 would a "capability" relate to the entity's ability 16:23:47

21 to have access to certain APIs on the Platform? 16:23:54

22 A. Capabilities would -- would modify the -- 16:24:00

23 the behavior of the Facebook Platform in a number 16:24:06

24 of different ways. 16:24:08

25 Q. And, again, I'm trying to understand how 16:24:11

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1 the term is used in the context of Facebook's 16:24:13  
2 discussions of what APIs a third party has access 16:24:15  
3 to. 16:24:19

4 Does that help in any way to flesh out 16:24:21  
5 what it means? 16:24:25

6 A. So a capability -- my previous answer, I 16:24:27  
7 think, is accurate in that a capability is a way 16:24:30  
8 for the standard behavior of the Facebook Platform 16:24:34  
9 to be modified in some way. 16:24:37

10 Q. And I'm -- I apologize for struggling to 16:24:42  
11 understand this, but -- so let's assume that an app 16:24:44  
12 or a developer wants to have access to friend 16:24:49  
13 data-related permissions. Okay? 16:24:53

14 Can we start with that premise? 16:24:59

15 And I'll ask a question based on that 16:25:03  
16 premise: 16:25:05

17 Is there a capability that would be 16:25:06  
18 provided to that developer that would enable access 16:25:07  
19 to those permissions -- or to those APIs? 16:25:10

20 A. Can you help me understand what time frame 16:25:15  
21 you're referring to? 16:25:17

22 Q. Sure. Any time between 2007 and the 16:25:21  
23 present. 16:25:24

24 A. So I think the answer depends on the time. 16:25:28  
25 In -- you know, the early part of that time period, 16:25:34

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1       let's say 2012, access to the friend permissions       16:25:40

2       was available to all applications on the Facebook       16:25:47

3       Platform.       16:25:51

4               Later on, the friend permissions were not       16:25:53

5       available to every app on the Platform, and access       16:25:58

6       to those would have required a modification to the       16:26:03

7       standard API behavior. And that would have been       16:26:06

8       governed by capability.       16:26:10

9               Q. Thank you. You've helped me understand       16:26:12

10       any number of documents I have reviewed now.       16:26:14

11       That's helpful information.       16:26:17

12               We can move on.       16:26:20

13               Do you understand what "read permission       16:26:22

14       APIs" are?       16:26:24

15               A. So there's two different concepts that are       16:26:28

16       worth picking apart: There's the concept of       16:26:31

17       permissions, and there's a concept of APIs, and       16:26:35

18       those are separate concepts.       16:26:38

19               So I'm not sure how to answer the       16:26:44

20       question.       16:26:46

21               Q. Let me break it down. I've seen reference       16:26:47

22       to "read stream APIs," for example.       16:26:50

23               Are you familiar with those?       16:26:52

24               A. I am familiar with the -- the concept of a       16:26:56

25       read stream API, yes.       16:26:59

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1 Q. Okay. What is that? 16:27:02

2 A. In the context of the Facebook Platform? 16:27:07

3 Is that what you're asking about? 16:27:09

4 Q. Yes. 16:27:11

5 A. My understanding is that the read stream 16:27:13

6 API would allow an application to access a -- 16:27:16

7 the -- an authorized -- a user who -- let me start 16:27:20

8 again to make sure I'm framing this correctly for 16:27:24

9 you. 16:27:26

10 The read stream API would allow an 16:27:28

11 application to access a user's Newsfeed. In order 16:27:31

12 to access that API, the user would have to give the 16:27:35

13 application permission to do so. 16:27:41

14 Q. And what about Social Context APIs? What 16:27:45

15 are those? 16:27:50

16 A. My understanding is a Social Context API 16:27:54

17 refers to an API that helped applications 16:27:57

18 understand the relationships between two users of 16:28:02

19 the application. 16:28:06

20 Q. Two users, or any number of users? 16:28:10

21 A. My understanding is the Social Context API 16:28:15

22 referred to social context between two app-using 16:28:17

23 users. 16:28:22

24 Q. And we'll get into this in more detail 16:28:25

25 later, but both with read stream and social context 16:28:28

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1 APIs, the information that the app or developer 16:28:31  
2 would access would include friend information for 16:28:36  
3 the users that authorized the app or developer to 16:28:38  
4 have access. Right? 16:28:43

5 A. Sorry. Can you restate the question? I 16:28:44  
6 want to make sure I fully understand. 16:28:46

7 Q. Sure. You described what a read stream 16:28:48  
8 permission was, and you described what a social 16:28:50  
9 context API was. 16:28:53

10 Both of those APIs, if authorized by a 16:28:55  
11 user, would provide access to friends information 16:28:57  
12 of that user. Right? 16:28:59

13 A. The read stream API would grant access to 16:29:04  
14 an app using a person's Newsfeed. A Newsfeed on 16:29:07  
15 Facebook typically contains content posted by that 16:29:13  
16 user's friends. 16:29:17

17 Q. Okay. And how about the social context 16:29:18  
18 API? Would that do the same? 16:29:19

19 A. I'd have to review the API documentation 16:29:24  
20 for -- for the -- if there was a specific API 16:29:26  
21 you're referring to, exactly how it behaved. 16:29:31

22 Q. And that's a helpful qualification. 16:29:36

23 Is there a set of -- or a place where 16:29:40  
24 documentation of APIs is stored so that if Facebook 16:29:43  
25 wanted to understand the specific information that 16:29:46



1	that API made available, it could go to that set	16:29:49
2	and find the answer?	16:29:52
3	A. The Facebook developer website is	16:29:56
4	typically where API documentation is stored and	16:29:58
5	published.	16:30:02
6	Q. And that's true for any API that has ever	16:30:04
7	existed, or simply for the active APIs?	16:30:08
8	A. That -- the Facebook developer website is	16:30:16
9	typically for APIs that are available -- publicly	16:30:18
10	available.	16:30:22
11	And so not every API that's ever existed	16:30:23
12	would necessarily have a documentation -- would	16:30:26
13	have a document on the Facebook developer website.	16:30:30
14	Q. Okay. So where would one go to find	16:30:33
15	information on every API that ever existed?	16:30:35
16	A. The -- I'm not sure every API that ever	16:30:42
17	existed necessarily had a -- a document -- an	16:30:46
18	associated document written about it.	16:30:51
19	The source of truth for which APIs existed	16:30:53
20	and so on would have been the Facebook code base	16:30:57
21	itself.	16:31:01
22	Q. And how would one go about searching that	16:31:03
23	for information about a defunct API?	16:31:06
24	A. There are internal tools at Facebook that	16:31:10
25	allow user search for code which existed in the	16:31:13

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1 Facebook code base. 16:31:19

2 Q. And what are those internal tools? 16:31:21

3 A. I am not sure of the name of the internal 16:31:27

4 tools. I'd have to get back to you on -- on the 16:31:31

5 specific name of the tool. 16:31:35

6 MR. LOESER: And, Counsel, if you could 16:31:39

7 get back to us with that information, I'd 16:31:40

8 appreciate it. 16:31:42

9 MR. BLUME: Noted. 16:31:47

10 BY MR. LOESER: 16:31:48

11 Q. And, Mr. Cross, what is a "private API"? 16:31:50

12 A. Can you help me understand the context in 16:31:58

13 which you're asking the question? 16:32:01

14 Q. Sure. In the context of email and other 16:32:03

15 materials reviewed -- that you reviewed to prepare 16:32:05

16 for this deposition, the term "private API" is 16:32:09

17 frequently used. 16:32:14

18 Do you have an understanding of what is 16:32:15

19 meant by that at Facebook? 16:32:17

20 A. My understanding of the term "private API" 16:32:19

21 is that it would be an API that was not generally 16:32:22

22 available to most applications on the Facebook 16:32:27

23 Developer Platform. 16:32:33

24 Q. Okay. So explain to me what the 16:32:36

25 difference is between a private API and a 16:32:38

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1 capability. 16:32:41

2 A. So a "private API" would refer to a 16:32:42

3 specific API method, generally, that could be 16:32:47

4 accessed by developers. 16:32:51

5 A "capability" is the means by which 16:32:53

6 access to that API is governed. 16:32:56

7 Q. We discussed how APIs function and how 16:33:07

8 APIs provide access to developers or other entities 16:33:09

9 about information about Facebook users. 16:33:16

10 Were there any other technical means by 16:33:21

11 which Facebook shared information about its users 16:33:24

12 with developers or other entities? 16:33:25

13 A. The Graph API was the -- was a primary way 16:33:31

14 that information would be exchanged with third 16:33:36

15 parties. It's possible at the company there were 16:33:40

16 other ways for people to exchange information with 16:33:44

17 third parties; email, for example. But the 16:33:49

18 Graph API would have been one of the common ways to 16:33:55

19 programmatically exchange information. 16:33:58

20 Q. And can you identify any other ways to 16:34:01

21 programmatically exchange information? 16:34:04

22 A. I don't have the ability to -- to know 16:34:11

23 every form of information interchange ever used 16:34:15

24 by -- by the company, so I -- I don't feel I can 16:34:20

25 specify other -- any specific other systems. The 16:34:26

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1 Graph API would have been a common one. 16:34:31

2 There were other APIs in existence over 16:34:34

3 time. Two examples would be the REST API and 16:34:38

4 something called FQL. 16:34:45

5 Q. And explain, if you can, what those two 16:34:49

6 systems are. 16:34:51

7 A. So the REST API was a -- a mechanism, a 16:34:53

8 form of API used by the Facebook Platform to 16:34:59

9 exchange information with third parties that 16:35:03

10 pre-existed the Graph API, and the two were in use 16:35:05

11 simultaneously for a period. 16:35:12

12 FQL -- 16:35:14

13 Q. Let me pause you there. Sorry to 16:35:16

14 interrupt, but what period did that exist, and when 16:35:17

15 was it overlapping? 16:35:21

16 A. The REST API, my understanding, was the 16:35:24

17 original form of the Facebook Developer Platform. 16:35:28

18 So my understanding is that was launched in 2007. 16:35:30

19 And my understanding is the REST API was 16:35:37

20 deprecated in -- I'm not sure of the specific date, 16:35:39

21 but my understanding is around the time that 16:35:43

22 Graph API Version 1.1 or 1.2 was -- was announced. 16:35:46

23 But that -- we can follow up with a 16:35:53

24 specific because I want to make sure I don't give 16:35:57

25 you the wrong answer. 16:36:00

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1 Q. Sure. And do you have a rough idea of 16:36:01  
2 what year the Graph API came into being? 16:36:03  
3 A. The Graph API was launched in April 2010. 16:36:07  
4 Q. So we've touched on the Graph API 16:36:17  
5 Version 1, and that's another important term. I 16:36:20  
6 want to make sure I understand that. 16:36:23  
7 So Graph API version, was it 1.0 or 1.1? 16:36:26  
8 What was the very first version of that 16:36:31  
9 system? 16:36:33  
10 A. The Graph API was launched in April 2010. 16:36:35  
11 At the time, it was just called the "Graph API." 16:36:39  
12 Q. Okay. And I gather from your LinkedIn 16:36:42  
13 résumé, you had something to do with the initial 16:36:45  
14 development of the Graph API version zero, I guess, 16:36:47  
15 whatever you call it. Is that right? 16:36:53  
16 A. So the version of the API that was 16:36:55  
17 originally launched in April 2010 is what later 16:36:57  
18 became known as Version 1. 16:37:00  
19 I was actually not involved in the 16:37:03  
20 development of that. It was launched in 16:37:05  
21 April 2010. I joined the company in 16:37:07  
22 September 2010. 16:37:11  
23 Q. Okay. So let's -- let me make sure I 16:37:15  
24 understand the different versions. 16:37:17  
25 It starts with Graph API, period, and then 16:37:19

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1       it evolved into what? 16:37:22

2               What were the different evolutions of 16:37:24

3       that, of the Graph API? 16:37:26

4               A. It was called just the "Graph API" from -- 16:37:29

5       from launch in April 2010. That -- that, kind of, 16:37:32

6       version later became known as "API Version 1" when 16:37:38

7       a new version that was referred to as 16:37:43

8       "API Version 2" was launched in April 2014. 16:37:45

9               Q. And in the evolution from Version 1 and 16:37:52

10       Version 2, were there specific reasons why Facebook 16:37:55

11       made changes? 16:37:59

12              A. The Graph API, the original version of the 16:38:02

13       Graph API, evolved constantly over time as well. 16:38:06

14       So there were changes being made to the -- to the 16:38:10

15       Graph API from launch for a wide range of reasons. 16:38:14

16              Q. Okay. And, specifically, in the changes 16:38:20

17       from Version 1 to Version 2, what were the 16:38:22

18       reasons -- what were the major changes that were 16:38:24

19       made? 16:38:27

20              A. It was a large number of changes launched 16:38:29

21       as part of API Version 2. 16:38:33

22              How much -- how much depth would you like 16:38:37

23       me to go into? 16:38:39

24              Q. Well, let me ask it this way: What were 16:38:41

25       the problems that Facebook was trying to solve in 16:38:44

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1 the transition from Version 1 to Version 2? 16:38:47

2 A. There was a -- also a whole -- also a 16:38:51

3 whole range of problems that -- that we were 16:38:53

4 attempting to solve. 16:38:56

5 Can you help me understand, like, what you 16:38:58

6 are looking for? 16:39:00

7 Q. Well, let's start at the -- are you 16:39:01

8 familiar with the expression "the 30,000-foot 16:39:03

9 level"? 16:39:07

10 A. I've heard of that term, yes. 16:39:08

11 Q. Okay. So let's think about it in terms of 16:39:10

12 at the 30,000-foot level if there were major issues 16:39:13

13 that Facebook was attempting to solve through that 16:39:17

14 transition, if any of those come to mind. 16:39:19

15 A. I'll do my best to explain some. 16:39:23

16 One was that the original way that 16:39:27

17 breaking changes had been made in the Facebook 16:39:32

18 Developer Platform was in an app configuration. 16:39:34

19 So in your app, configuring your app 16:39:39

20 settings, that was a workable mechanism when the 16:39:42

21 Facebook Platform was primarily called by 16:39:48

22 server-side applications. 16:39:52

23 In the early 2010s, the developer 16:39:55

24 ecosystem moved more and more to mobile 16:40:00

25 applications, which meant developers' code running 16:40:02

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1 on devices, which meant that it was harder for them 16:40:08  
2 to centrally control changes to the API. 16:40:12  
3 And so one of the big problems that 16:40:15  
4 Facebook was trying to solve with the launch of 16:40:18  
5 API Version 2 was the introduction of versioning 16:40:21  
6 itself; to allow developers to specify the API 16:40:23  
7 behavior they wanted when calling the API. 16:40:28  
8 Q. Okay. And can you think any of other 16:40:32  
9 major problems Facebook was attempting to resolve 16:40:34  
10 with Graph API Version 2? 16:40:39  
11 A. Another thing that was being solved with 16:40:45  
12 Version 2 is the limiting of the amount of data 16:40:48  
13 that was available via the API. 16:40:53  
14 Q. And why did Facebook want to do that? 16:40:58  
15 A. It was a range of reasons why Facebook was 16:41:02  
16 attempting to alter the amount of information that 16:41:07  
17 was available via the API. 16:41:10  
18 One reason that comes to mind is that we 16:41:14  
19 had heard feedback from users that they were 16:41:18  
20 concerned about the amount of information that was 16:41:22  
21 available via the API, and we wanted to increase 16:41:25  
22 trust -- user trust in the Facebook Developer 16:41:30  
23 Platform, and that was one of the drivers behind 16:41:32  
24 that decision. 16:41:39  
25 Q. And when Facebook heard from users about 16:41:40

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1       their concerns, were those concerns with respect to       16:41:43  
2       any particular types of user information that was       16:41:48  
3       being made available to third parties?       16:41:51

4             A.   There was a -- a range of concerns.   One       16:41:55  
5       of them was the ability for apps to access friends       16:41:59  
6       information.       16:42:04

7             Q.   And was another reason to limit the amount       16:42:07  
8       of user information made available to developers a       16:42:10  
9       desire by Facebook to better profit from the data       16:42:17  
10      it collected about users by giving away less to       16:42:20  
11      developers for free?       16:42:23

12            A.   Can you repeat the question?       16:42:28

13                    Sorry, I want to make sure I understand.       16:42:29

14            Q.   Sure.   It took me great mental acuity to       16:42:31  
15      say it in the first place, so how about if I       16:42:36  
16      just -- if we read it back and see, if you heard it       16:42:38  
17      a second time, it makes better sense.   It might       16:42:41  
18      just be a bad question, but let me look and see.       16:42:44  
19      And I can read it.       16:42:47

20                    Was another reason to limit the amount of       16:42:48  
21      user information made available to developers a       16:42:50  
22      desire by Facebook to better profit from the data       16:42:53  
23      it collected about users by giving away less of       16:42:55  
24      that information for free?       16:42:59

25            A.   Having spoken to people and read       16:43:05

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1 documents, that's -- that's not a concern that was, 16:43:08  
2 as I understand it, front and center in the 16:43:11  
3 decision-making. 16:43:14

4 Q. Was that a concern that was discussed or 16:43:15  
5 expressed at times, however? 16:43:17

6 A. I have recalled seeing documents that 16:43:23  
7 were -- there were a number of discussions about 16:43:28  
8 how to balance the equities between users, 16:43:32  
9 developers, and Facebook -- in this case, the 16:43:36  
10 company Meta but also the application -- as to how 16:43:39  
11 the Facebook Developer Platform was being used. 16:43:43

12 Q. Thank you. Do you know, when was the 16:43:50  
13 first time or time period that Facebook heard 16:43:53  
14 concerns expressed by users about the amount of 16:43:58  
15 their information that was being made available to 16:44:01  
16 third parties? 16:44:04

17 A. I don't know -- I'm not able to sense 16:44:09  
18 specifically when those concerns began to be heard. 16:44:14

19 I am aware that there was some -- some 16:44:18  
20 research done, and there were some discussions 16:44:20  
21 happening in -- in the 2012 and 2013 time period; 16:44:23  
22 but exactly, you know, when this was -- was -- 16:44:28  
23 began to be discussed is hard for me to say with 16:44:36  
24 specificity. 16:44:38

25 Q. And then Graph API Version 2 became 16:44:39

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1 notice. 16:46:21

2 You testified that Facebook provided 16:46:22

3 access to Facebook user information to what we've 16:46:23

4 called "third parties" through APIs. Right? 16:46:26

5 A. The Facebook Developer Platform allowed 16:46:30

6 third parties to build applications that accessed 16:46:33

7 data on Facebook users via the Graph API or via a 16:46:38

8 set of APIs. 16:46:44

9 Q. And apps are one category of the third 16:46:47

10 parties that could access APIs on the Facebook 16:46:50

11 Platform? 16:46:54

12 A. Sorry. Can you -- this is one of the 16:47:00

13 things that -- to make sure we get right and 16:47:01

14 understand, can you specify -- just repeat the 16:47:04

15 question again? 16:47:06

16 And -- if you're referring to one of the 16:47:07

17 categories, could you help me understand what, in 16:47:10

18 your mind, is the other categories? 16:47:12

19 Q. Sure. I'm going to go through some 16:47:14

20 different categories. I'm trying to understand the 16:47:16

21 different entities that were allowed to use the -- 16:47:18

22 the -- use APIs to access information. 16:47:21

23 And one of those -- and I'm calling them 16:47:23

24 "categories." If you have different terminology, 16:47:25

25 please tell me what it is. 16:47:27

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1 But one of the categories that could 16:47:29

2 access APIs was -- are referred to as "apps." 16:47:30

3 Right? 16:47:34

4 A. So in the context of the Facebook 16:47:36

5 Developer Platform, to access any information via 16:47:38

6 the API had to be done through a Facebook app ID; 16:47:43

7 through a Facebook application with a specific 16:47:47

8 Facebook app ID. 16:47:50

9 Q. Okay. So that brings me to my next 16:47:51

10 question, which is partners. 16:47:54

11 Facebook has what it refers to as 16:47:56

12 "partners." Correct? 16:47:58

13 A. I've heard -- I've seen the term "partner" 16:48:02

14 used. It refers to a wide range of relationships 16:48:05

15 between Facebook and its -- and various third 16:48:08

16 parties. 16:48:13

17 Q. Okay. And you were involved in the 16:48:14

18 partnerships group for four years or so at 16:48:16

19 Facebook? 16:48:19

20 A. I was -- I was involved in the 16:48:21

21 partnerships organization from September 2010 until 16:48:22

22 around January 2014. 16:48:25

23 Q. Okay. And what did the term 16:48:28

24 "partnerships" mean in that context? 16:48:30

25 A. In that context, "partnerships" refers to 16:48:33

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1 a range of relationships between Facebook and -- 16:48:37

2 and third parties, ranging from informal to more 16:48:41

3 structured relationships governed by contracts. 16:48:48

4 Q. And with regard to those partnerships, was 16:48:51

5 Facebook providing access to user information 16:48:55

6 through APIs? 16:48:57

7 A. In the context of the Platform 16:49:00

8 Partnerships team, we typically -- the people on 16:49:02

9 the Platform Partnerships team would typically be 16:49:05

10 working with third parties that were using the 16:49:09

11 Facebook Platform in some way. 16:49:11

12 Q. Okay. And I think this is what I'm trying 16:49:13

13 to get at. 16:49:15

14 Are there entities that Facebook calls 16:49:16

15 "partners" that have access to Facebook user 16:49:17

16 information but do not have apps on the Platform? 16:49:21

17 A. In this specific -- in this context, I -- 16:49:27

18 I am not aware of -- of -- in this specific 16:49:34

19 context, when we're talking about platform 16:49:39

20 partnerships, it's typically referring to entities 16:49:41

21 that use the Facebook Developer Platform, which 16:49:44

22 would typically be done by -- through an app ID, 16:49:47

23 but there were other features of the Facebook 16:49:51

24 Developer Platform that did not require you to use 16:49:53

25 an app ID. 16:49:56

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1 Q. And, generally speaking, what were those 16:49:57  
2 features? 16:49:59

3 A. One common set of examples was the social 16:50:02  
4 plug-ins, which a developer or an entity could 16:50:04  
5 embed on their own website, that didn't access the 16:50:09  
6 Facebook API -- sorry -- didn't access the 16:50:13  
7 Graph API. 16:50:19

8 Q. And how did those features provide access 16:50:20  
9 to Facebook user information? 16:50:24

10 A. Those products were embedded on -- 16:50:29  
11 typically embedded on the third-party website and 16:50:33  
12 would render information to the -- to the person 16:50:36  
13 viewing the web page. 16:50:40

14 The -- the entity that ran the web page 16:50:43  
15 would not see the contents within the social 16:50:46  
16 plug-in. 16:50:50

17 Q. And would Facebook obtain that 16:50:53  
18 information? 16:50:54

19 A. To render a social plug-in, it would be 16:50:57  
20 rendered by Facebook servers. 16:50:59

21 Q. Okay. So that was a mechanism by which 16:51:02  
22 Facebook obtained information about Facebook users 16:51:04  
23 while they were off-platform? 16:51:07

24 A. The way the "Like" button worked was to 16:51:12  
25 render -- if you visited a website that had the 16:51:15

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1 "Like" button embedded on it, then the Like button 16:51:17  
2 would render. And in order to render it, Facebook 16:51:21  
3 would receive a request from the user's web 16:51:24  
4 browser. 16:51:29

5 Q. Okay. And that was not through an API; 16:51:29  
6 that was through this other product. 16:51:31

7 A. The social plug-ins are a different way of 16:51:36  
8 Facebook integrating information into third-party 16:51:40  
9 contexts that users could access. 16:51:45

10 Q. And what is the time period that social 16:51:49  
11 plug-ins have existed? 16:51:52

12 A. My understanding is that social plug-ins 16:51:55  
13 were launched alongside the Graph API in 16:51:58  
14 April 2010. 16:52:00

15 Q. And are they still active today? 16:52:03

16 A. I think there are some social plug-ins 16:52:06  
17 still active today, although I'm not certain, and 16:52:09  
18 that's something we can follow up on. 16:52:12

19 Q. And is there a tool that allows Facebook 16:52:15  
20 to identify what social plug-ins exist and the time 16:52:17  
21 period in which they've been active? 16:52:21

22 A. The Facebook code base, similar to my 16:52:25  
23 previous answer, would allow you to -- would allow 16:52:29  
24 someone to understand which social plug-ins have 16:52:31  
25 existed over what period of time. 16:52:34



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1 Q. Are you familiar with the term 16:52:39  
2 "integration partners"? 16:52:40  
3 A. I've heard the phrase "integration 16:52:43  
4 partners," yes. 16:52:46  
5 Q. And what is an "integration partner"? 16:52:49  
6 A. Again, can you help me understand in the 16:52:52  
7 context in which you're asking the question? 16:52:54  
8 Q. Sure. All of my questions are around 16:52:57  
9 trying to understand how Facebook shares 16:52:59  
10 information with what I'm calling "third parties," 16:53:00  
11 and my understanding is that integration partners 16:53:02  
12 are an entity with which Facebook shares user 16:53:06  
13 information. 16:53:08  
14 So in that context. 16:53:08  
15 A. My understanding of the term -- of 16:53:12  
16 integration partners in that context is a set of 16:53:14  
17 entities, third parties, that Facebook had a 16:53:19  
18 relationship with to enable them to build 16:53:24  
19 Facebook-like or -- Facebook-branded or 16:53:28  
20 Facebook-like or feedback-branded experiences on 16:53:33  
21 the third party's platforms and services. 16:53:37  
22 Q. And so Facebook user information was 16:53:42  
23 provided to integration partners. Right? 16:53:46  
24 A. Typically, the way that an integration 16:53:52  
25 partner application works is that the application 16:53:54

1	was offered to users on that platform.	16:53:59
2	Users would choose to use that application	16:54:02
3	and, as a result of the user choosing to use the	16:54:05
4	application, information about -- information would	16:54:12
5	be shared -- that the user had granted access to	16:54:17
6	would be shared with the third party in order for	16:54:22
7	them to provide the experience for a user.	16:54:24
8	Q. And do integration partners have apps on	16:54:28
9	the Facebook Platform?	16:54:31
10	A. The way that you would -- a developer	16:54:34
11	would interact with the Facebook APIs would be	16:54:38
12	through an app ID, which is what I'm referring to	16:54:42
13	as an "application" in this specific context.	16:54:47
14	Q. Okay. And, again, I'm just -- I want to	16:54:50
15	make sure I understand.	16:54:53
16	So in order to create that Facebook	16:54:54
17	experience on a phone, would the information	16:54:56
18	necessary to create that experience be communicated	16:55:03
19	to that phone company via the Graph API or through	16:55:06
20	some other mechanism?	16:55:12
21	A. To build one of these integration partner	16:55:16
22	experiences, the information would be made	16:55:19
23	available through the Graph API; but, typically,	16:55:22
24	the information would be accessed from the device	16:55:27
25	itself that the user was using.	16:55:32

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1 Q. Okay. So not through an app on the 16:55:36  
2 Facebook Platform. 16:55:38

3 A. This is where we need to make sure we're 16:55:42  
4 using the specific terms. 16:55:44

5 The way you access the Facebook set of 16:55:47  
6 APIs, the Facebook Platform, is through an entity 16:55:49  
7 called a "Facebook app ID" or a "Facebook app," 16:55:52  
8 which has an app ID. That identifies -- that 16:55:55  
9 allows the owner of the app to make calls against 16:56:00  
10 the Facebook APIs. 16:56:03

11 So, in that context, that's very 16:56:06  
12 specifically what I'm referring to as a "Facebook 16:56:09  
13 app." 16:56:10

14 Q. Okay. And is there anything -- And, 16:56:13  
15 again, this clarification is really helpful. 16:56:16

16 In thinking about how integration partners 16:56:21  
17 get information about Facebook users, is there 16:56:23  
18 anything different about that system than the way a 16:56:26  
19 normal app developer gets information about users? 16:56:28

20 A. On a technical level, the way that the 16:56:34  
21 information is exchanged would have been done 16:56:37  
22 through the Graph API, which is the standard way to 16:56:39  
23 access -- that users would give their information 16:56:44  
24 to apps and third parties. 16:56:50

25 So, at a technical level, the mechanism of 16:56:55

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1 information interchange is the same, but an 16:56:59  
2 integration partner would be -- would be billing, 16:57:03  
3 typically, a different kind of experience than a 16:57:06  
4 regular Facebook Platform developer. 16:57:09

5 Q. And that experience was different because 16:57:14  
6 one is on the Platform, the Facebook Platform, and 16:57:17  
7 the other is on the integration partner's device? 16:57:20

8 A. So this -- again, this is for me to get 16:57:27  
9 very specific about. 16:57:31

10 In the context of the Facebook Platform, 16:57:32  
11 there is a concept of a feedback app, which is the 16:57:34  
12 entity that determines the -- how the information 16:57:38  
13 is accessed, what permissions have been granted by 16:57:42  
14 users, and so on. 16:57:45

15 What developers build are often also 16:57:47  
16 called "apps," and, like, that's a -- that's a 16:57:50  
17 different concept. 16:57:56

18 The application that a third-party 16:57:58  
19 developer would build might run on their web 16:58:01  
20 server. It might run on their hardware. It might 16:58:05  
21 run on a user's physical device. 16:58:08

22 And so these are distinct concepts which 16:58:12  
23 are important to -- to separate. 16:58:15

24 Q. Does Facebook have a term for -- for users 16:58:19  
25 that interact with integration partners, or are 16:58:23

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1       they called "integration users," or is there some       16:58:27  
2       terminology that applies to that?       16:58:30

3           A. I'm not aware of distinct terminology that       16:58:32  
4       would be different. These are just users.       16:58:35

5           Q. And before, you mentioned that a user       16:58:42  
6       authorizes the integration partner to obtain       16:58:45  
7       information when the user interacts with that --       16:58:47  
8       let's call it -- again, let's call it a phone, a       16:58:52  
9       mobile phone. Is that right?       16:58:57

10          A. When a -- a good -- I think the easiest       16:59:00  
11       way to answer this question is with an example.       16:59:04

12                So one good example here would be a       16:59:07  
13       Facebook-branded app on the BlackBerry mobile       16:59:11  
14       platform.       16:59:15

15                The user -- a user would typically have a       16:59:17  
16       BlackBerry device or buy a BlackBerry device.       16:59:21  
17       There would be a Facebook-branded app available on       16:59:24  
18       that device. The user would choose to log in to       16:59:29  
19       the application and, as a result of doing that,       16:59:32  
20       would give the code running on the BlackBerry       16:59:35  
21       device the ability to access that information that       16:59:40  
22       that user would have had access to on Facebook on       16:59:46  
23       the app built onto the -- the Facebook-branded       16:59:49  
24       application built onto the BlackBerry device they       16:59:54  
25       were using.       16:59:59

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1 Q. Okay. And in that example, the user 17:00:00  
2 authorizes access to the Facebook user's 17:00:03  
3 information. Correct? 17:00:06

4 A. When I -- if a user chooses to use the 17:00:09  
5 Facebook-branded application on a BlackBerry 17:00:14  
6 device, they are logging in on -- to that 17:00:17  
7 application; and, as a result, the application has 17:00:22  
8 access to some of the information that that user 17:00:24  
9 would be able to see on Facebook. 17:00:26

10 Q. And that information that that company 17:00:29  
11 would have access to would include information 17:00:33  
12 about the user's friends. Right? 17:00:36

13 A. In the specific example I was just talking 17:00:40  
14 about here, this would be a Facebook-branded 17:00:42  
15 application; a Facebook-branded product running on 17:00:46  
16 the user's BlackBerry device. 17:00:52

17 And the user's BlackBerry device would 17:00:54  
18 then be making calls to Facebook's API in order to 17:00:56  
19 render a Facebook experience -- a representative 17:01:00  
20 Facebook experience on that user's BlackBerry 17:01:04  
21 device. 17:01:06

22 Q. And that would -- among other types of 17:01:08  
23 information that would be made available in that 17:01:12  
24 example, friends information would be made 17:01:14  
25 available. Right? 17:01:17

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1           A. Typically, a user would expect when 17:01:18  
2           they're using a Facebook-branded experience to see 17:01:20  
3           information about their friends and what their 17:01:26  
4           friends had been doing. 17:01:28

5           Q. And so the answer is yes? 17:01:30

6           A. If I'm using a Facebook-branded 17:01:34  
7           application on a BlackBerry device, I would expect 17:01:37  
8           to see information about my friend, yes. 17:01:40

9           Q. And in that example, the friends are not 17:01:42  
10          the ones who authorized BlackBerry to obtain that 17:01:45  
11          information. Right? 17:01:50

12          A. The user is using a BlackBerry application 17:01:51  
13          on the BlackBerry device, and the user has 17:01:54  
14          authorized that application to access Facebook's 17:01:57  
15          APIs in order to render a Facebook experience on 17:02:01  
16          that device. 17:02:05

17          Q. So the answer to my question is, correct, 17:02:06  
18          the friends did not authorize BlackBerry's access 17:02:11  
19          to their information? 17:02:14

20          A. One of my friends may have also had a 17:02:16  
21          BlackBerry device and may have logged in to the 17:02:19  
22          Facebook-branded experience on that device. 17:02:22

23                 Where I have -- I'm using Facebook -- the 17:02:27  
24          Facebook-branded experience on my BlackBerry 17:02:31  
25          device, then I am receiving -- I would be seeing 17:02:34

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1 data on my phone that was from my friends that may 17:02:37  
2 not have been using BlackBerry. 17:02:43  
3 Q. So, again, to answer the question, when 17:02:50  
4 BlackBerry obtained friend information, that friend 17:02:52  
5 information would include the information of people 17:02:56  
6 who did not themselves use the BlackBerry device. 17:02:59  
7 A. I'm trying to -- I'm trying to 17:03:04  
8 understand -- 17:03:05  
9 Q. I -- like -- 17:03:06  
10 A. Sorry. 17:03:08  
11 Q. Sorry. Go ahead. I apologize for 17:03:09  
12 interrupting. 17:03:10  
13 A. I -- I'm trying to work through the 17:03:12  
14 specific example and explain the -- you know, how 17:03:16  
15 these things, you know, worked from a user level 17:03:18  
16 and a technical level. 17:03:22  
17 In this case, you know, it's a -- it's a 17:03:24  
18 set of code that happened to be written by 17:03:27  
19 engineers at BlackBerry that ran on a user's 17:03:31  
20 device, and it was that code that would have been 17:03:36  
21 accessing -- typically, in that case -- accessing 17:03:38  
22 the Facebook API. 17:03:41  
23 Q. Right. As you said, as you explained in 17:03:44  
24 more detail, when a user authorizes BlackBerry to 17:03:46  
25 obtain the information, some of those user's 17:03:49



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1 friends may also have authorized BlackBerry. 17:03:53

2 And in that situation, both of those 17:03:56

3 people had authorized BlackBerry to obtain their 17:03:58

4 information. Right? 17:04:01

5 A. It's possible that -- yes, I would have 17:04:03

6 had -- I might have used -- I never actually had a 17:04:07

7 BlackBerry -- one of my friends -- I may have used 17:04:10

8 the Facebook application on a BlackBerry device. 17:04:13

9 One of my friends may have also used a 17:04:16

10 Facebook application on a BlackBerry device. But 17:04:19

11 when I was using the Facebook application on the 17:04:22

12 BlackBerry device, the experience would have 17:04:24

13 included information provided by the Facebook API 17:04:27

14 about people who had -- who were not necessarily 17:04:29

15 using the BlackBerry application on their 17:04:33

16 BlackBerry device -- the Facebook-branded 17:04:36

17 application on their BlackBerry device. 17:04:39

18 MR. LOESER: Okay. Thank you. 17:04:41

19 Mr. Blume, we have been going for a bit, 17:04:43

20 and we're about to transition into another area. 17:04:46

21 If now would be a time you would want to 17:04:49

22 take a break, that would be fine with me, or we can 17:04:51

23 keep rolling. 17:04:54

24 MR. BLUME: Now would be great. Thank you 17:04:55

25 very much. 17:04:57

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1 THE VIDEO OPERATOR: Okay. And we're off 17:04:58

2 the record. It's 5:04 P.M. 17:04:59

3 (Recess from 5:04 P.M. to 5:22 P.M.) 17:21:36

4 (Mr. Melamed joined the deposition.) 17:22:59

5 THE VIDEO OPERATOR: We're back on the 17:23:01

6 record. It's 5:22 P.M. 17:23:01

7 BY MR. LOESER: 17:23:03

8 Q. I'm not sure whether to say good morning 17:23:05

9 or good afternoon, but still morning here and late 17:23:07

10 afternoon for you, so whichever. 17:23:10

11 Welcome back. 17:23:12

12 And a few other questions I realized 17:23:15

13 before we get into the notice itself, and I'm going 17:23:17

14 to ask you about a term I've seen in some Facebook 17:23:21

15 documents called "nonapp user-sharing." 17:23:24

16 Is that a term that you're familiar with? 17:23:28

17 A. I'm not familiar with the term "nonapp 17:23:33

18 user-sharing" specifically, no. 17:23:36

19 Q. Okay. Let me try and dig in a bit and see 17:23:39

20 if we can figure it out. 17:23:42

21 In addition to user information and users' 17:23:44

22 friends' information, Facebook at times provided 17:23:50

23 third parties access to information from people who 17:23:53

24 are not friends with the user. Is that correct? 17:23:55

25 A. I think my -- sorry. 17:24:03

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1 Repeat that again. The specifics matter, 17:24:05

2 yeah. 17:24:07

3 Q. Yeah. So let me give you an example, and 17:24:09

4 you can -- and maybe what I said makes more sense. 17:24:12

5 Are you familiar with the Events API? 17:24:16

6 A. I am familiar with the Events API. 17:24:21

7 Q. And what is the "Events API"? 17:24:23

8 A. The Events API, as I understand it, refers 17:24:26

9 to a set of APIs that would be used by a Facebook 17:24:29

10 Platform application to access the events that a 17:24:35

11 user of the application was attending or had been 17:24:40

12 invited to attend, for example, or had attended in 17:24:47

13 the past, and -- yeah. I think that's -- that's a 17:24:52

14 high-level explanation. 17:25:00

15 Q. And so the Events API provided access to 17:25:02

16 information about [REDACTED], but also 17:25:05

17 [REDACTED] at an event. Right? 17:25:08

18 A. My understanding is that the API allowed 17:25:12

19 an application to see [REDACTED] 17:25:15

20 [REDACTED] yes. 17:25:20

21 Q. And some of those [REDACTED] 17:25:21

22 [REDACTED] 17:25:23

23 Correct? 17:25:25

24 A. The API would -- my understanding is the 17:25:27

25 API would return a [REDACTED] 17:25:30

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1 [REDACTED] 17:25:34

2 [REDACTED] 17:25:38

3 Q. And is that situation -- have you seen 17:25:39

4 that described as "providing access to nonapp-user 17:25:41

5 information"? 17:25:46

6 A. I don't recall seeing it described as 17:25:53

7 that, but that -- that term seems like a reasonable 17:25:55

8 one to use in that context. 17:26:02

9 Q. Let's go back to Exhibit 330 and to 17:26:09

10 page 13, which was the -- and we're going to post 17:26:15

11 all the exhibits on the screen so if it's easier 17:26:21

12 for you to look that way, you can do that. 17:26:23

13 And while we're getting there, I am going 17:26:38

14 to read Topic 6, which is one of the topics for 17:26:40

15 which you have been designated to testify. 17:26:43

16 It is: 17:26:46

17 "The development of friend-sharing, 17:26:46

18 including but not limited to: its purpose 17:26:48

19 and identification of those involved in its 17:26:50

20 development; how the technology functioned; 17:26:52

21 the APIs and permissions associated with 17:26:55

22 friend-sharing; the communication of this 17:26:59

23 technology to users, including the drafting 17:27:01

24 of Facebook's Terms of Service, SRR, and Data 17:27:04

25 and Privacy Policies relating to 17:27:09

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1 friend-sharing; and the revenue impact and 17:27:11

2 net profits for Facebook relating to 17:27:15

3 friend-sharing throughout the Class Period." 17:27:16

4 Did I read that correctly? 17:27:19

5 A. You read that correctly. 17:27:21

6 Q. And my understanding from communications 17:27:23

7 from your counsel is that you have not prepared or 17:27:26

8 been prepared to testify about the following 17:27:30

9 clause: 17:27:34

10 "...the communication of this technology 17:27:35

11 to users, including the drafting of 17:27:36

12 Facebook's Terms of Service, SRR, and Data 17:27:39

13 and Privacy Policies relating to 17:27:43

14 friend-sharing." 17:27:44

15 Is that correct? 17:27:46

16 A. That's correct with my understanding, yes. 17:27:47

17 Q. And, sir, over the course of your 17:27:50

18 employment at Facebook, have you developed personal 17:27:51

19 knowledge of the topic I just read? 17:27:54

20 A. My personal knowledge would cover that to 17:28:03

21 some degree, yes. 17:28:05

22 Q. Mr. Cross, tell me what you did to prepare 17:28:07

23 to testify regarding Topic 6. 17:28:11

24 A. I spoke to a number of people inside the 17:28:16

25 company. I reviewed the documents that have been 17:28:18

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1 produced in this case, both some documents that my 17:28:25  
2 legal team shared with me and the documents that 17:28:30  
3 you have shared with me. 17:28:34

4 I also spent some time looking at the 17:28:36  
5 Facebook developer website as it was in the past to 17:28:39  
6 understand how -- how the platform originally 17:28:45  
7 worked would refresh my memory. 17:28:50

8 Q. And as to the statement you just made, 17:28:54  
9 where did you go to find how the Developer Platform 17:28:57  
10 existed in the past? 17:29:02

11 A. I used the Wayback Machine, otherwise 17:29:05  
12 known as archive.org, I think, is its address. 17:29:12

13 Q. Okay. So you didn't use any system or 17:29:17  
14 tool within the Facebook structure. 17:29:20

15 A. Not to access the previous versions of the 17:29:24  
16 Facebook developer website, no. 17:29:26

17 Q. And I asked you about whether you had 17:29:30  
18 personal knowledge of the communication subtopic. 17:29:32

19 With regard to the remainder of the topics 17:29:36  
20 covered by Topic 6, over the course of your 17:29:38  
21 employment, did you develop personal knowledge of 17:29:41  
22 those topics as well? 17:29:43

23 A. Given my involvement in this product area, 17:29:47  
24 I did develop personal knowledge of how these 17:29:50  
25 things worked. 17:29:54

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1 Q. And is there any component of this notice 17:29:56  
2 that is a topic that the sole source of your 17:29:58  
3 knowledge is the preparation you did for this 17:30:03  
4 deposition? 17:30:06

5 A. Give me a second just to read the terms 17:30:10  
6 again. 17:30:15

7 (Reviewing document.) 17:30:19

8 THE WITNESS: And your question was the -- 17:30:26  
9 the -- in preparing -- sorry. 17:30:29

10 Just repeat your question again. 17:30:31

11 Is it the sole thing is my personal 17:30:33  
12 experience, or the sole thing is not my personal 17:30:36  
13 experience? 17:30:38

14 BY MR. LOESER: 17:30:39

15 Q. Not your personal experience. 17:30:39

16 I'm trying to find out if there's any 17:30:40  
17 aspect of this that you only know about because of 17:30:43  
18 the preparations that you did for this deposition 17:30:45  
19 today. 17:30:47

20 A. Of those, the -- the revenue impact and 17:30:49  
21 net profits is an area that I was not closely 17:30:51  
22 involved in at the time. And so in trying to 17:30:54  
23 answer your forthcoming questions on that topic, 17:30:59  
24 I'll be primarily, if not exclusively, relying on 17:31:04  
25 the preparation I've done and the documents I've 17:31:07

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1 read. 17:31:09

2 Q. And for that particular issue, what 17:31:11

3 preparation did you do? 17:31:15

4 A. I reviewed a set of documents that had 17:31:18

5 been produced in this -- in this case, and I asked 17:31:21

6 some of the people that I spoke to in preparation 17:31:25

7 what their recollection was around assessments of 17:31:30

8 revenue impact and net profits. 17:31:34

9 Q. And who were the people that you spoke to 17:31:38

10 on that topic? 17:31:41

11 A. I would have spoken to Eddie O'Neil, 17:31:45

12 Ime Archibong, and -- I'm trying to remember who I 17:31:52

13 spoke to about what -- and I think Francisco 17:32:01

14 Varela. 17:32:14

15 Q. Mr. Cross, based on your preparation with 17:32:21

16 regard to Topic 6, do you believe you are 17:32:25

17 reasonably educated to testify on these matters, 17:32:28

18 with the one caveat of the communication piece? 17:32:31

19 A. I've done my best to be prepared to 17:32:34

20 testify on these matters, yes. 17:32:36

21 Q. Okay. So do you believe you are 17:32:37

22 reasonably educated to testify on these matters? 17:32:39

23 A. I believe I'm reasonably educated to 17:32:43

24 testify on these matters. 17:32:46

25 Q. And do you agree that the notice concerns 17:32:47

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1 information that is known or reasonably available 17:32:50  
2 to Facebook? 17:32:53  
3 A. That matches my understanding; yes, known 17:32:56  
4 or reasonably available to Facebook. 17:33:02  
5 Q. So let's look more at Topic 6. 17:33:05  
6 And this topic, obviously, concerns 17:33:08  
7 friend-sharing. Right? 17:33:16  
8 A. The topic concerns the development of 17:33:19  
9 friend-sharing, as I understand it, yes. 17:33:22  
10 Q. And tell me: What was the purpose of 17:33:24  
11 friend-sharing for Facebook? 17:33:26  
12 A. To help me answer that, can you define for 17:33:30  
13 me what you think you mean by the phrase 17:33:32  
14 "friend-sharing"? 17:33:34  
15 Q. That is an excellent question, and so let 17:33:35  
16 me ask you: 17:33:38  
17 How does Facebook -- what does Facebook 17:33:40  
18 mean by the term "friend-sharing"? 17:33:42  
19 A. In this context, my understanding of the 17:33:47  
20 phrase "friend-sharing" is where a Facebook 17:33:51  
21 application would be able to access some 17:33:54  
22 information about an app user's friends that hadn't 17:33:58  
23 necessarily explicitly used that application. 17:34:04  
24 Q. And can we expand the definition to also 17:34:11  
25 cover the context in which private APIs are used to 17:34:14

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1 give access to friend information, or would that be 17:34:19  
2 covered by what you said? 17:34:24

3 A. It's hard to answer that question given 17:34:30  
4 the -- the definition of "private API" being a wide 17:34:31  
5 range of things would be classified or classifiable 17:34:37  
6 as private APIs; many not limited -- or not 17:34:40  
7 involving friend-sharing in any way. 17:34:46

8 Q. And I appreciate that, and so I'm asking 17:34:48  
9 specifically about private APIs that provided 17:34:51  
10 access to friend-sharing information. 17:34:54

11 I mean, I guess I should ask: Private 17:35:01  
12 APIs did, in fact, for some partners provide access 17:35:03  
13 to friend information. Right? 17:35:06

14 A. There were some partners who had access to 17:35:12  
15 information that users had authorized the 17:35:18  
16 application to access that included friend 17:35:23  
17 information. 17:35:29

18 Q. Okay. And so when I use the phrase 17:35:30  
19 "friend-sharing" for purposes of this deposition, I 17:35:33  
20 intend to mean any friend-sharing, when it was via 17:35:35  
21 private APIs or otherwise via APIs on the Platform. 17:35:40

22 Is that fair? 17:35:46

23 A. I think we should -- I'll try and call out 17:35:49  
24 where that distinction is important because there's 17:35:52  
25 a number of different ways in this -- that these 17:35:56

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1 things worked. 17:36:00

2 I understand your -- your initial 17:36:01

3 understanding of -- I refer back to my definition 17:36:04

4 of "friend-sharing," and I will try and -- I will 17:36:08

5 try and call out where I see a distinction between 17:36:12

6 friend-sharing as it was available to regular, 17:36:16

7 nonwhitelisted developers and via private APIs. 17:36:21

8 Q. I appreciate that. And I have some 17:36:28

9 questions, too, that separate along those lines, so 17:36:29

10 I think that will work quite well. 17:36:32

11 And I asked you what the purpose of 17:36:34

12 "friend-sharing" was. 17:36:35

13 So with that definition of 17:36:37

14 "friend-sharing," can you describe what the purpose 17:36:37

15 was? 17:36:39

16 A. Friend-sharing was an inherent part of the 17:36:42

17 Facebook Platform as it was built, starting in 17:36:47

18 2007, to allow app developers to build engaging 17:36:50

19 social experiences. 17:36:55

20 In many cases, a user would be the first 17:37:02

21 person to -- they know to authorize an application, 17:37:05

22 and in order for that application to build an 17:37:12

23 engaging social experience, the application would 17:37:14

24 have access to a subset of the information that 17:37:18

25 that user could see on Facebook. 17:37:23

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1           The original premise of the Facebook           17:37:26  
2           Platform is the -- the app that a user was           17:37:28  
3           authorizing would be able to see things that they           17:37:34  
4           could also see on Facebook.           17:37:39

5           Q. And who came up with the idea of           17:37:43  
6           friend-sharing?           17:37:45

7           Is there a particular person?           17:37:46

8           A. I don't know. We -- I don't know the           17:37:49  
9           specific name of the person who came up with           17:37:54  
10          friend-sharing.           17:37:56

11          The ability to access information about           17:37:57  
12          the friends of a person using an application was,           17:38:04  
13          as I understand it, part of the Facebook Developer           17:38:10  
14          Platform from its inception; and so the people           17:38:12  
15          involved in developing the Facebook Platform would           17:38:15  
16          have been the people determining how it operated.           17:38:17

17          Q. And was Mark Zuckerberg involved in the           17:38:23  
18          development of the platform?           17:38:27

19          A. There were a number of people involved in           17:38:31  
20          the development of the platform circa 2007, when it           17:38:33  
21          was launched. I imagine Mark was aware that this           17:38:36  
22          platform was launching. I don't know how much he           17:38:41  
23          was involved in the development of the platform.           17:38:45

24          Q. And do you know if Mark Zuckerberg had           17:38:49  
25          anything to say one way or the other about whether           17:38:55

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1 friend-sharing should be part of the platform at 17:38:57  
2 its outset? 17:38:59

3 A. I have not seen any documents or 17:39:01  
4 communication that would indicate how the decisions 17:39:04  
5 as to how the platform was designed were -- were 17:39:11  
6 come to. 17:39:14

7 Q. And would you agree that the 17:39:17  
8 friend-sharing APIs provided a significant amount 17:39:21  
9 of information about users to app developers? 17:39:27

10 A. Can you help me understand what you mean 17:39:33  
11 by the "friend-sharing APIs"? 17:39:34

12 That's not a term I'm familiar with. 17:39:36

13 Q. Well, what is the term you use to describe 17:39:38  
14 the different APIs that provided for access to 17:39:40  
15 friend information? 17:39:44

16 A. They would just be called the "APIs." The 17:39:48  
17 Likes API, for example, would be one. And then 17:39:52  
18 that API could be called in a number of different 17:39:57  
19 contexts. 17:40:00

20 Q. And weren't there a number of APIs that 17:40:01  
21 had the word "friends" in them? 17:40:04

22 A. There were a number of permissions that 17:40:08  
23 had the words "friends" in them. There may have 17:40:10  
24 been some APIs with the word "friends" in, but I -- 17:40:14  
25 again, the difference between APIs and permissions 17:40:18

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1 is an important concept to draw. 17:40:21

2 Q. Okay. Well, let's talk about permissions, 17:40:24

3 then. 17:40:26

4 So when I've seen lists of what I've been 17:40:27

5 referring to as "APIs" that say "friends video 17:40:30

6 watch" or "friends posts" or "friends whatever," 17:40:33

7 I've been -- I think of those as APIs. 17:40:36

8 But you're telling me I should think of 17:40:39

9 those as permissions. 17:40:42

10 A. There's a -- in Graph API Version 1, there 17:40:44

11 was a specific set of permissions that were 17:40:47

12 referred to as the "friends permissions." 17:40:50

13 And I think that's the most proper way to 17:40:53

14 refer to them. 17:40:57

15 Q. And were friends permissions widely used 17:40:59

16 permissions prior to the implementation of 17:41:03

17 Graph API Version 2? 17:41:06

18 A. Can you help me understand what you mean 17:41:09

19 by "widely used"? 17:41:10

20 Q. Well, what does that term just naturally 17:41:13

21 mean to you? 17:41:17

22 A. It could mean a number of different 17:41:18

23 things. It could mean whether or not they were 17:41:20

24 frequently asked by applications; regularly granted 17:41:23

25 by users. 17:41:31

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1 Hard to answer without the specifics. 17:41:32

2 Q. Well, let's start with frequently called 17:41:34

3 by applications. 17:41:36

4 Were friends permissions frequently called 17:41:40

5 by applications? 17:41:42

6 A. They were -- friend permissions were 17:41:45

7 certainly requested by many applications, but many 17:41:48

8 applications -- I think the majority of 17:41:51

9 applications on the Facebook Developer Platform 17:41:55

10 would not have requested -- would not have 17:41:58

11 typically requested access to friends information. 17:42:00

12 Q. And -- but a tremendous volume of user 17:42:04

13 data was made accessible through friends 17:42:08

14 permissions, wouldn't you say? 17:42:11

15 A. I am not sure what you mean by 17:42:14

16 "tremendous." 17:42:15

17 The friend permissions allowed 17:42:17

18 applications on the Facebook Platform to access 17:42:20

19 information about an app user's friends. 17:42:22

20 Q. And Facebook was concerned about the 17:42:25

21 amount of information that was made available via 17:42:27

22 the friends permissions. Correct? 17:42:30

23 A. There were discussions internally about 17:42:34

24 how the friend permissions were being used by 17:42:38

25 applications. 17:42:42

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1 MR. LOESER: Why don't we put up an 17:42:53  
2 exhibit. And -- Tab 4, which would be 331 now? 17:42:54  
3 332. All right. We're going to mark 17:43:03  
4 Exhibit 332. 17:43:06  
5 (Deposition Exhibit 332 was marked for 17:43:07  
6 identification.) 17:43:09  
7 BY MR. LOESER: 17:43:12  
8 Q. And over the course of the day, I'm going 17:43:12  
9 to be referring to "tabs." That's really just for 17:43:15  
10 our benefit over here. A document will magically 17:43:18  
11 appear on your screen that are tabs for me but are 17:43:21  
12 Bates numbers for you. So -- and exhibit numbers. 17:43:25  
13 This is a slipcover sheet which is not the 17:43:34  
14 document itself that has the metadata for the 17:43:37  
15 document. 17:43:39  
16 So if we can go to the next page of the 17:43:40  
17 document, I'm showing you an email from the name 17:43:42  
18 that we can't say that we have agreed to call "KP" 17:43:45  
19 to a number of people, including Allison Hendrix, 17:43:50  
20 dated September 27, 2013. 17:43:54  
21 Is that the document that's in front of 17:43:57  
22 you? 17:44:00  
23 A. That's the document I see, yes. 17:44:01  
24 Q. And can you look at the first paragraph, 17:44:09  
25 the first full paragraph of that document? 17:44:11

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1 A. Yep. 17:44:16

2 Q. And KP writes: 17:44:17

3 "Hello, all, A quick update from my end. 17:44:18

4 The spreadsheet with the [REDACTED] 17:44:21

5 [REDACTED] has now been updated with the number 17:44:22

6 [REDACTED] in the course of 17:44:26

7 [REDACTED] This is an indication of the volume 17:44:30

8 of identity required by those third parties. 17:44:32

9 I must admit, I was surprised to find out 17:44:35

10 that we are giving out a lot here for no 17:44:38

11 obvious reason...just to give you an idea." 17:44:42

12 A. You missed the word "data" between 17:44:44

13 "identity" and "required," I think, but other than 17:44:46

14 that, you got -- 17:44:48

15 Q. Thank you. 17:44:49

16 And do you understand what "identity data" 17:44:50

17 is? 17:44:52

18 A. It's hard for me here to be -- to know 17:44:56

19 specifically what he's referring to, but -- yeah, 17:44:59

20 so it's hard for me to know explicitly what he is 17:45:06

21 referring to. 17:45:09

22 In my personal capacity, I would 17:45:09

23 understand that to mean -- no, I'm not sure I could 17:45:13

24 conclusively say what he's referring to by 17:45:24

25 "identity data." 17:45:26

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1 Q. Could it be information about Facebook 17:45:28  
2 users? 17:45:30  
3 Does that seem like a reasonable 17:45:31  
4 interpretation of that phrase? 17:45:32  
5 A. Looking at the API call here, this 17:45:35  
6 would -- my understanding is this is referring to 17:45:40  
7 the number of requests to a user ID, like a user -- 17:45:43  
8 the user -- what we would call the "user method" of 17:45:49  
9 the Graph API. 17:45:52  
10 Q. Okay. And is it a fair interpretation 17:45:54  
11 that KP was surprised at the volume of identity 17:45:57  
12 data -- identity data acquired by third parties who 17:46:02  
13 were calling on friends permissions? 17:46:06  
14 A. No. 17:46:13  
15 Q. How do you interpret this email? 17:46:16  
16 A. I interpret this as he uses the word 17:46:19  
17 "surprised," and he uses the phrase "identity 17:46:24  
18 data." 17:46:29  
19 But the three -- there were -- two of the 17:46:31  
20 three examples here are -- one of the three 17:46:34  
21 examples is about the user method, and the friends 17:46:37  
22 list and the user feed are two of the other three 17:46:42  
23 things he talks about here. 17:46:45  
24 He does not specifically refer in this 17:46:48  
25 email to friends data. 17:46:50

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1 Q. And what do you think he means when he 17:46:54  
2 says -- or what -- how would Facebook interpret the 17:46:56  
3 phrase that he was "surprised to find out we were 17:46:59  
4 giving out a lot here for no obvious reason"? 17:47:01

5 A. My interpretation is that the [REDACTED] 17:47:09  
6 [REDACTED] seems -- he's -- he's surprised by the 17:47:12  
7 [REDACTED], although it doesn't refer 17:47:20  
8 specifically to the amount of data that was made 17:47:25  
9 available. 17:47:27

10 Q. And why would the -- why did the [REDACTED] 17:47:30  
11 [REDACTED] matter? 17:47:33

12 A. The [REDACTED] is an easily 17:47:37  
13 identifiable, retrievable number. It's potentially 17:47:40  
14 indicative of the [REDACTED] that those 17:47:48  
15 mentioned apps were [REDACTED] 17:47:53

16 Q. And if you look at the first example he 17:47:59  
17 provides here, [REDACTED] 17:48:03  
18 [REDACTED] [REDACTED] I 17:48:07  
19 interpret this to mean [REDACTED] monthly average 17:48:15  
20 users. Is that right? 17:48:18

21 A. "MAUs" means monthly active users. 17:48:21

22 Q. So [REDACTED] monthly active 17:48:26  
23 users, right, according to this? 17:48:29

24 A. According to this, when the data was 17:48:32  
25 pulled by whoever pulled the data, it suggests that 17:48:33

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1 [REDACTED] monthly active users. 17:48:37

2 Q. Okay. And it had what appears to be 17:48:41

3 [REDACTED] 17:48:43

4 Is that what that says? 17:48:47

5 A. That's what I read from the document. 17:48:48

6 Q. So there were 138 times more requests than 17:48:51

7 there were users in the last 30 days. 17:48:55

8 A. I can't do the math in my head, but I 17:49:00

9 understand -- 17:49:03

10 Q. He has it -- yeah, sorry to interrupt, but 17:49:04

11 the math is there. It says "138X." Right? 17:49:07

12 A. I see "138S" on the page, yeah. 17:49:10

13 Q. You're saying that you're not sure his 17:49:13

14 math is right, but -- right? 17:49:14

15 A. Yeah, I'm not doing a -- I'm not doing the 17:49:17

16 math in my head. I'm just reading the numbers off 17:49:19

17 the page. 17:49:22

18 Q. And what does it suggest to Facebook if -- 17:49:22

19 if there are 138 times as many requests for 17:49:26

20 identity data than there are monthly active users? 17:49:31

21 A. It might suggest that the app was not very 17:49:37

22 efficiently developed. 17:49:40

23 Q. Might it also suggest that the app was 17:49:43

24 obtaining information in ways that weren't related 17:49:45

25 to the use case for the app? 17:49:51

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1           A. It might mean that the app was making           17:49:56  
2           requests for user data. It doesn't necessarily           17:49:59  
3           indicate that that's inappropriate given the use           17:50:02  
4           case of the app.           17:50:08

5           Q. Okay. But here in this email. KP           17:50:09  
6           indicated that he was "surprised to find out that           17:50:12  
7           we were giving out a lot -- giving out a lot here           17:50:15  
8           for no obvious reason."           17:50:18

9           And then he says, "Just to give you an           17:50:20  
10          idea," and he indicates how much is being given           17:50:22  
11          out. Right?           17:50:24

12          A. Well, he's indicating [REDACTED]           17:50:25  
13          were made in a [REDACTED], but he's not making           17:50:27  
14          any assertion or diagnosis as to why that was the           17:50:31  
15          way it was.           17:50:40

16          Q. Right. But he's indicating that it's --           17:50:41  
17          that -- those figures he provided may satisfy and           17:50:46  
18          provide meaning to the statement, "giving out a lot           17:50:50  
19          here," would you say?           17:50:53

20          A. I think he's -- by "giving out a lot,"           17:50:56  
21          he's likely referring to the number of API calls           17:50:59  
22          made, but it doesn't necessarily refer to -- it           17:51:02  
23          doesn't necessarily mean he's diagnosed that -- you           17:51:09  
24          know, information about different users is being           17:51:14  
25          exposed here.           17:51:17

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1           It's eminently possible that Sunrise           17:51:19  
2       queried the API for its app users very           17:51:23  
3       inefficiently.           17:51:28

4           Q.   And for Facebook, is that considered           17:51:31  
5       somewhat of a red flag?           17:51:33

6           A.   I think there's a number of reasons why           17:51:39  
7       Facebook might be interested in how applications           17:51:41  
8       are calling the API.           17:51:43

9           One example might be that if the app is           17:51:45  
10      developed inefficiently, then there is an impact on           17:51:50  
11      Facebook's ability to serve those requests 'cause           17:51:54  
12      every time the API is called, a lot of code has to           17:51:57  
13      be run.           17:52:01

14          Q.   And do you think that's what KP was           17:52:04  
15      sending this email about?           17:52:08

16          A.   I'm not -- there's no reference here as to           17:52:13  
17      exactly what -- whether or not that was a reason           17:52:15  
18      that KP was sending this email.           17:52:19

19          I think my understanding from reading this           17:52:21  
20      is that KP was curious as to the [REDACTED]           17:52:24  
21      relative to the [REDACTED] of           17:52:32  
22      the app.           17:52:36

23          Q.   And in the context of the subject of this           17:52:39  
24      email, which is [REDACTED]           17:52:42  
25      [REDACTED] what do you think KP -- what was           17:52:45

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1 Facebook's concern about [REDACTED] 17:52:49

2 A. From this email, it's hard to know 17:52:58

3 specifically what the issue was. I -- I was not on 17:53:00

4 this email thread in a personal capacity, and I was 17:53:05

5 unable to talk to KP about what he meant because 17:53:11

6 he's no longer at the company. 17:53:15

7 Q. And in stepping away from this email, was 17:53:19

8 Facebook aware that friends permissions were often 17:53:23

9 called by apps in ways that exceeded the use case 17:53:29

10 for the app? 17:53:35

11 A. At the time there was a number of 17:53:40

12 discussions about how apps were using the 17:53:41

13 information they got via the API. One of those 17:53:46

14 reasons would have been that there were some 17:53:53

15 questions about how that information was being 17:53:58

16 used. 17:54:00

17 Q. And what's the time frame you're referring 17:54:02

18 to in your answer? 17:54:04

19 A. My answer here, I'm referring to around 17:54:08

20 2013, the -- roughly when I have reviewed documents 17:54:12

21 about this time, where there was a number of 17:54:15

22 discussions taking place about how apps were using 17:54:18

23 the Facebook Developer Platform and which 17:54:23

24 particular APIs and permissions they were using. 17:54:27

25 Q. The way friend-sharing was set up, a 17:54:33

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1 Facebook user decided whether an app or integration 17:54:35

2 partner got access to the user's friend data. 17:54:39

3 Right? 17:54:43

4 A. The way the Facebook Platform worked is 17:54:44

5 that users would authorize an application to access 17:54:46

6 their information. They could also, in API 17:54:49

7 Version 1 and before, grant the application access 17:54:56

8 to information about -- some information about that 17:54:58

9 user's friends who had not -- who were not 17:55:05

10 necessarily using the application. 17:55:07

11 Q. Okay. And on an app-by-app basis, the 17:55:09

12 friends themselves did not have a say in whether 17:55:16

13 their information was made available to the app 17:55:19

14 that their friend used. Right? 17:55:20

15 A. My understanding is that developers -- 17:55:24

16 users could opt out of the Facebook Developer 17:55:27

17 Platform, and that would prevent their information 17:55:29

18 being shared with most third parties. 17:55:33

19 Q. Okay. And that -- and let me make sure I 17:55:37

20 understand your testimony. 17:55:41

21 The only way to stop your friends from 17:55:43

22 sharing your information with an app was to turn 17:55:45

23 off apps altogether on the Platform. Is that 17:55:47

24 right? 17:55:49

25 A. The controls available to users changed 17:55:54

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1 over time. For a period, there was a way for users 17:55:57  
2 to access a setting -- an area of settings called 17:56:04  
3 "Apps Others Use" -- I think I'm getting that 17:56:08  
4 right -- which allowed them to control which 17:56:11  
5 subsets of their information were available to 17:56:14  
6 applications via the friend permissions. 17:56:19

7 Q. And what period was that choice available? 17:56:22

8 A. I don't know specifically when that -- 17:56:31  
9 those settings were made available or were removed. 17:56:33  
10 It was certainly available, as I understand it, in 17:56:37  
11 around 2014. 17:56:40

12 Q. And why was that choice taken away from 17:56:48  
13 users? 17:56:51

14 A. My understanding is that that area of 17:56:52  
15 settings was removed when there were no or few 17:56:54  
16 third-party applications that had access to that 17:57:04  
17 information via the APIs. 17:57:08

18 Q. And do you have an understanding -- or 17:57:15  
19 what is Facebook -- well, strike that. 17:57:16

20 What was the time period for which the 17:57:18  
21 only way to stop your friends from sharing 17:57:20  
22 information was to turn off apps altogether on the 17:57:23  
23 Platform? 17:57:25

24 A. To answer that question, I'd need to know 17:57:29  
25 exactly when the Apps Others Use setting was 17:57:31

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1 introduced, which is a date I don't have, I'm 17:57:36

2 afraid. 17:57:38

3 Q. Okay. And will you follow up and provide 17:57:39

4 that information? 17:57:41

5 You would provide it to your counsel, who 17:57:46

6 can provide it to us. 17:57:47

7 A. I'm sure we could try and attempt to 17:57:49

8 follow up on determining when those settings 17:57:51

9 were -- were introduced. 17:57:54

10 Q. And where would you go to search for the 17:57:57

11 answer to that question? 17:57:59

12 A. My immediate step would be to ask the 17:58:08

13 engineers who had worked on that feature or may 17:58:10

14 have worked on that feature to try and identify 17:58:15

15 when that feature was made available. 17:58:20

16 Q. Thank you. During the time that the only 17:58:27

17 way to turn off -- or to block your friend from 17:58:29

18 sharing your information was by turning off apps 17:58:33

19 altogether, can you explain why friend-sharing was 17:58:37

20 set up that way? 17:58:41

21 A. The original design of the Facebook 17:58:45

22 Platform rested on a very simple premise, which is 17:58:47

23 that the user has access to information by using 17:58:54

24 Facebook, and the user could allow apps to access 17:58:58

25 the information that they could see on Facebook, 17:59:04

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1 and that would allow those applications to build 17:59:06  
2 rich, engaging social experiences. 17:59:11  
3 That was the simple, clear, founding 17:59:14  
4 premise of the Facebook Developer Platform. 17:59:18  
5 Q. From your testimony, it sounds like, just 17:59:22  
6 from a technical standpoint, it is possible for 17:59:25  
7 Facebook to provide a setting through which, on an 17:59:27  
8 app-by-app basis, Facebook users can determine 17:59:32  
9 whether their friends share their information. 17:59:37  
10 Right? 17:59:44  
11 A. The testimony I think you're referring to 17:59:44  
12 from a few minutes ago refers to a set of settings 17:59:46  
13 called "Apps Others Use," which allowed users to 17:59:50  
14 opt out of certain types of their information being 17:59:55  
15 shared with any apps their friend used. 17:59:59  
16 My understanding is that was not an 18:00:03  
17 app-by-app setting. 18:00:05  
18 Q. Okay. I want to make sure I understand 18:00:10  
19 that. 18:00:13  
20 So was there any time when a Facebook user 18:00:13  
21 could block a particular app that one of their 18:00:18  
22 friends used? 18:00:23  
23 Let's call the app "friend's app." So was 18:00:25  
24 there at any time a setting where a user would have 18:00:30  
25 the option of saying no to a friend's app getting 18:00:32

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1       their information because their friend used that       18:00:37

2       app?       18:00:40

3             A.   The feature that enables -- there was a       18:00:42

4       feature called "Blocks" which allows a user to       18:00:47

5       block a specific application.       18:00:50

6             My understanding is that that would mean       18:00:52

7       the application would not have access to their       18:00:55

8       information by the --       18:00:58

9             Q.   So would the user get a notice, say, from       18:01:04

10       friend's app that said, "Your friend wants to share       18:01:07

11       your information. Do you -- are you providing --       18:01:11

12       like, will you authorize that?"       18:01:13

13             Is that how it functioned?       18:01:15

14             A.   The way friend-sharing worked was that a       18:01:17

15       user could authorize an application, grant       18:01:20

16       permissions to that application to access -- well,       18:01:24

17       actually, let me back up.       18:01:28

18             The -- the permissions were introduced       18:01:30

19       into the API sometime after the Facebook Developer       18:01:33

20       Platform was first launched.       18:01:39

21             When -- in the original version, when a       18:01:44

22       friend -- when a user authorized an application,       18:01:46

23       that application had access to information about       18:01:48

24       that user and some information about that user's       18:01:52

25       friends.       18:01:55

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1                   There were -- the user -- the user's                   18:01:57

2                   friends would not get notified that their friend               18:02:00

3                   was using the application. There would be no               18:02:02

4                   placebo active notifications.                   18:02:05

5                   Q. And what was that time period?                   18:02:08

6                   A. The way the permissions -- the granular               18:02:11

7                   permissions were launched in April 2010, and so the           18:02:16

8                   specific feature I'm referring to there is prior to           18:02:21

9                   April 2010, apps would access a range of               18:02:27

10                  information without granular permissions needed to       18:02:35

11                  be granted.                   18:02:38

12                  Starting in April 2010, users granted               18:02:40

13                  specific permissions to an application determining       18:02:43

14                  which data that application had access to.           18:02:46

15                  Q. Right.                   18:02:52

16                  A. Through both of those periods, when a user       18:02:52

17                  installed an application, their friends would not       18:02:56

18                  be notified that they had done so.               18:02:59

19                  Q. Okay. And was there a point in time when,       18:03:03

20                  before a user could share the user's friends           18:03:04

21                  information, the users got notice that the app was       18:03:10

22                  seeking friends information?               18:03:13

23                  A. I'm not aware of any time where a               18:03:16

24                  nonapp-user would be notified that one of their       18:03:20

25                  friends was using an application.               18:03:23

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1 Q. Okay. And why was Facebook set up that 18:03:26  
2 way so that friends didn't receive notification 18:03:29  
3 when their users -- when their friends were trying 18:03:33  
4 to provide access to their information? 18:03:36

5 A. The original premise of the Facebook 18:03:41  
6 Platform was that when a user was using an 18:03:42  
7 application, that application had access to, at the 18:03:48  
8 limit, potentially, anything that that user would 18:03:52  
9 be able to see on Facebook. 18:03:55

10 It was the user taking the information 18:03:57  
11 that had been shared with them and making that 18:03:59  
12 available to an application. 18:04:02

13 Q. And have you seen in documents that 18:04:07  
14 structure referred to as "authorization by proxy"? 18:04:10

15 A. I don't recall seeing that phrase in 18:04:16  
16 particular. 18:04:17

17 Q. So, now, could Facebook have set up the 18:04:24  
18 platform so that before an app could get access to 18:04:26  
19 a person's information, where that person was the 18:04:30  
20 friend of someone using the app, that they could 18:04:33  
21 have received notice that this app is attempting to 18:04:36  
22 gain the nonapp user's information? 18:04:40

23 A. It's technically possible that when a user 18:04:50  
24 authorized an application and granted friends 18:04:52  
25 permissions, that a notification could have been 18:04:58

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1 sent. That's technically possible. 18:05:03

2 It would have introduced a number of 18:05:07

3 unusual experiences, however. 18:05:09

4 Q. And what do you mean by that? 18:05:15

5 A. So sometimes I'm logging into an 18:05:21

6 application or I'm using an application for the 18:05:24

7 very first time. I'm not necessarily, you know -- 18:05:26

8 I'm using an application for the very first time. 18:05:30

9 It might be unexpected for Facebook to 18:05:33

10 broadcast -- to send a notification to some of my 18:05:39

11 friends that I was using the application. 18:05:46

12 Q. Now, unexpected or not, it would have 18:05:49

13 given those friends the ability to choose not to 18:05:51

14 share information in that context. Right? 18:05:54

15 A. So, again, in this case, the -- the way 18:05:58

16 that the Facebook Developer Platform was originally 18:06:01

17 set up was that an app -- based on the simple 18:06:03

18 founding premise that when -- if there was 18:06:10

19 information that a user could see on Facebook 18:06:13

20 because it had been shared with them on Facebook, 18:06:15

21 the -- that information would also be available to 18:06:18

22 applications that user was using. 18:06:23

23 Q. And were there discussions at Facebook of 18:06:30

24 the pros and cons of that approach to treating 18:06:33

25 information about users' friends? 18:06:37

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1           A. I've seen evidence of -- I've seen 18:06:42  
2           evidence of discussions where the -- the impact of 18:06:45  
3           that model was resulting in users being concerned 18:06:49  
4           about the information that they could share with 18:06:55  
5           applications and that their friends might be 18:07:01  
6           sharing with applications, ultimately leading to 18:07:03  
7           the changes made in 2014. 18:07:06

8           Q. And would it be fair to describe those 18:07:08  
9           concerns as "privacy concerns"? 18:07:10

10          A. I think there are a range of concerns as 18:07:13  
11          to how information was being shared with 18:07:15  
12          third-party apps through the Developer Platform. 18:07:21

13          Q. And were privacy concerns included in that 18:07:25  
14          range of concerns? 18:07:27

15          A. Privacy would have been -- information 18:07:31  
16          expectation would have been one of the concerns 18:07:34  
17          that was discussed. 18:07:36

18          Q. And by that, you mean people didn't 18:07:40  
19          realize their information was being shared in that 18:07:42  
20          way? 18:07:44

21          A. The -- there was discussion about the fact 18:07:47  
22          that some people might not be aware that a friend 18:07:50  
23          was using an application and that that friend's -- 18:07:56  
24          some of that user's friends' information had been 18:08:00  
25          shared with the app. 18:08:05



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1 MR. LOESER: Okay. If we could go to 18:08:08  
2 Tab 5. 18:08:10  
3 I'm going to introduce what will be marked 18:08:15  
4 as Exhibit 333. 18:08:17  
5 (Deposition Exhibit 333 was marked for 18:08:29  
6 identification.) 18:08:30  
7 BY MR. LOESER: 18:08:31  
8 Q. In a moment you'll see an email from 18:08:32  
9 David Poll to Eddie O'Neil and also dated 18:08:35  
10 December 9, 2013. 18:08:39  
11 Do you see that on your screen? 18:08:42  
12 A. I do. 18:08:44  
13 Q. Do you know who David Poll is? 18:08:44  
14 A. David Poll was an employee of Facebook, 18:08:50  
15 now Meta, in the past, and I recall him being one 18:08:54  
16 of the cofounders of a company called Parse. 18:08:58  
17 Q. And from -- was there discussion at 18:09:07  
18 Facebook about who owned friend information; 18:09:11  
19 whether it was the user's information or the 18:09:14  
20 friends' information? 18:09:19  
21 A. Let me just read the exhibit before I 18:09:21  
22 answer your question. 18:09:23  
23 Q. Sure. And I -- it's a long string, and 18:09:25  
24 I'm going to be asking you about some statements 18:09:29  
25 made by Eddie O'Neil and David Poll on the second 18:09:32

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1 page of the email, if that helps, on the bottom. 18:09:37

2 A. (Reviewing document.) 18:09:54

3 Okay. It just scrolled. 18:09:55

4 Q. Let me apologize. Let me save some time 18:09:56

5 by just referring you to -- if you go to the second 18:09:59

6 page, this is a chat between Eddie O'Neil and 18:10:01

7 David Poll. Is that right? 18:10:04

8 A. This to me represents a chat between Eddie 18:10:07

9 and David, yes. 18:10:10

10 Q. Okay. And if you go to the bottom of the 18:10:11

11 second page, about two thirds of the way down, 18:10:13

12 Eddie O'Neil says: 18:10:17

13 "I disagree -- your friends' birthdays 18:10:19

14 aren't yours to take with you. We let you do 18:10:22

15 that today, and it's created confusion along 18:10:25

16 with [REDACTED] It's also 18:10:27

17 exactly what's gotten us into trouble with 18:10:29

18 [REDACTED] 18:10:32

19 Do you see that? 18:10:32

20 A. I do see that. 18:10:33

21 Q. And does this -- does this suggest that at 18:10:35

22 Facebook, there was discussion about who owned -- 18:10:39

23 and I can put in air quotes -- who owned friend 18:10:43

24 information; whether it belonged to the user or 18:10:46

25 belonged to the friends? 18:10:48

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1           A. My understanding, this is a discussion           18:10:54  
2           about who -- who did or should have the ability to           18:10:55  
3           choose how information was shared with third           18:11:04  
4           parties.           18:11:09

5                     It's -- I'm not sure I'd refer to it as           18:11:10  
6           "who owns," but it's certainly a discussion about           18:11:13  
7           the model or the models for which information could           18:11:19  
8           or should be shared with third parties.           18:11:25

9           Q. And what is Mr. O'Neil referring to here           18:11:27  
10          when he says "it's created confusion along with           18:11:30  
11          [REDACTED]           18:11:34

12                     Do you know what he's talking about?           18:11:35

13          A. When he's referring to "created           18:11:37  
14          confusion," that's, in my understanding, referring           18:11:39  
15          to some of the feedback that had been heard from           18:11:43  
16          users about how information was being shared with           18:11:50  
17          third parties.           18:11:57

18                     I'm not sure what he's referring to in           18:11:58  
19          terms of [REDACTED] in particular.           18:12:02

20          Q. But Facebook, obviously, knows what           18:12:08  
21          [REDACTED] are -- were raised with           18:12:12  
22          regard to friends permissions. Right?           18:12:22

23                     MR. BLUME: Excuse me. I object.           18:12:26  
24          Privilege. Potential privilege. If I may --           18:12:28

25                     MR. LOESER: And let me -- sorry. Go           18:12:32

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1 ahead, Mr. Blume. 18:12:34

2 MR. BLUME: I just was asking permission 18:12:36

3 to instruct the witness unless you want to 18:12:38

4 rephrase. 18:12:40

5 MR. LOESER: Sure. 18:12:42

6 Q. Really, the point of my question was, you 18:12:42

7 don't know the answer to this question what the 18:12:44

8 [REDACTED] were, but Facebook knows 18:12:46

9 the answer to that. Right? 18:12:49

10 A. Eddie here is likely referring to a -- 18:12:55

11 it's hard to know what the specific "[REDACTED]" 18:13:00

12 [REDACTED] he's referring to are. 18:13:02

13 So I -- it's hard to answer on behalf of 18:13:08

14 the company in terms of specifically what he's 18:13:11

15 referring to. 18:13:13

16 Q. And when he refers to -- refers below to 18:13:15

17 "gotten us into trouble with [REDACTED] do you know 18:13:19

18 what he's referring to? 18:13:24

19 A. [REDACTED] was an application that had an 18:13:26

20 unusual behavior. I don't recall specifically in 18:13:33

21 detail what the application did other than it -- it 18:13:38

22 allowed -- I think, if I remember correctly, women 18:13:45

23 in particular -- specifically women, to rate in 18:13:50

24 some way their friends -- sorry -- rate other 18:13:52

25 people. 18:13:59

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1 But I -- I don't want to get into the -- 18:14:01

2 that's what I remember. I don't want to get into 18:14:03

3 the specifics. I haven't read up on the -- exactly 18:14:06

4 the specifics of this, but I've heard reference to 18:14:10

5 [REDACTED] and read references to [REDACTED] in the documents 18:14:13

6 I've read in preparation for this testimony. 18:14:17

7 Q. And that was -- that would be one of those 18:14:22

8 concerns that you would consider related to how 18:14:24

9 friend permissions were used by apps. Right? 18:14:28

10 A. My understanding is that the way [REDACTED] used 18:14:32

11 friend permissions was -- was something that there 18:14:36

12 was concern about at the time. 18:14:44

13 Q. And specifically the -- the nonapp users, 18:14:45

14 or the friends of the user, expressed concern about 18:14:50

15 how their information was being used by the app. 18:14:53

16 Right? 18:14:56

17 A. There were general concerns at the time 18:15:00

18 about how friends information had been -- had been 18:15:02

19 used. I -- I don't recall reading anything 18:15:05

20 specific about -- I've seen [REDACTED] mentioned, but I'm 18:15:12

21 not sure in exactly which -- which contexts. 18:15:16

22 Q. And if you look at the next line in 18:15:20

23 Mr. O'Neil's chat, it says: 18:15:23

24 "It's also accrued a huge amount of value 18:15:26

25 to developers at great expense to Facebook as 18:15:29

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1 a business." 18:15:31

2 And do you know what he is referring to 18:15:32

3 here? 18:15:34

4 A. There's a couple of terms here. 18:15:38

5 Which one do you want me to focus on 18:15:40

6 first? 18:15:42

7 Q. Well, is this a reference to the amount of 18:15:43

8 information that friends permissions was making 18:15:45

9 available to developers? 18:15:48

10 A. Reading this, it seems relevant to the 18:15:55

11 friend permissions, but "huge amount of value" may 18:15:59

12 refer to a number of different ways that a 18:16:03

13 developer would perceive the -- the value of the 18:16:07

14 experience that they had got by integrating with 18:16:13

15 the Facebook Platform. 18:16:15

16 Q. And what are -- what -- how can you 18:16:17

17 describe or what are the different ways that 18:16:21

18 developers obtained value from friends permission 18:16:23

19 information? 18:16:28

20 A. So the friend permissions allowed 18:16:32

21 applications to build rich, engaging social 18:16:35

22 experiences even when, you know, one -- let me 18:16:38

23 start that again to make sure I frame this 18:16:45

24 correctly for you. 18:16:48

25 One of the benefits of the friend 18:16:49

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1 permissions for developers was that they could 18:16:51  
2 build rich, engaging social experiences, including 18:16:54  
3 those where not all of a user's friends were also 18:16:59  
4 using the same application; also using the same 18:17:04  
5 app. 18:17:09

6 That could manifest value in different 18:17:09  
7 ways. It could enable applications to be more 18:17:12  
8 retentive, so they were more frequently used a 18:17:19  
9 whole number of different ways that the developers 18:17:23  
10 might benefit from building social experiences. 18:17:26

11 Q. And what are the ways that providing 18:17:32  
12 access to friends information was at "great expense 18:17:34  
13 to Facebook as a business"? 18:17:39

14 A. So one of the ways that this might be 18:17:47  
15 considered an expense is in trust and reputation. 18:17:50  
16 Because of the way the APIs functioned originally. 18:17:57

17 And, as I've testified previously, there 18:18:03  
18 were some concerns that we'd heard from users about 18:18:06  
19 how the Platform worked, and that confusion could 18:18:10  
20 have impacted the trust in Facebook as a product. 18:18:17

21 Q. And can you -- are there other types of 18:18:24  
22 expense that Facebook recognized related to 18:18:28  
23 providing access to friends permissions to 18:18:31  
24 developers -- or partners, for that matter? 18:18:34

25 A. One way that you might classify that is 18:18:38

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1 the computational energy it took to serve these 18:18:45  
2 requests. 18:18:50  
3 Actually serving an API call requires 18:18:52  
4 compute, and so that's another way that providing 18:18:56  
5 the platform in general and certain APIs would have 18:19:02  
6 been an expense to Facebook. 18:19:08  
7 Q. And what about the value of the -- of the 18:19:12  
8 friend information itself? 18:19:14  
9 Is that information valuable to Facebook 18:19:17  
10 as a business, from a monetization standpoint? 18:19:19  
11 A. Sorry. Can you help me understand the 18:19:25  
12 context of your question? 18:19:27  
13 That was a very general -- a general 18:19:29  
14 question. I would like to get to the specifics. 18:19:31  
15 Q. Sure. I'm just trying to understand from 18:19:33  
16 Facebook's perspective what the great expense to 18:19:36  
17 Facebook as a business was, and you've given me 18:19:39  
18 some examples. 18:19:42  
19 And I'm wondering if there's an economic 18:19:42  
20 impact as well that would be covered by providing 18:19:45  
21 thousands of apps with access to friend 18:19:47  
22 permissions. 18:19:50  
23 A. I'm not aware of any analysis that was 18:19:53  
24 done that specifically determined -- or attempts to 18:19:56  
25 determine the -- the financial value of friend 18:20:01



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1 permissions or the friend data as part of the 18:20:08  
2 Developer Platform. 18:20:11

3 Q. Okay. Let's look at David Poll's text at 18:20:15  
4 the bottom of the page. And he states: 18:20:18

5 "If you want to give users a way to 18:20:21  
6 protect their data, it seems like the best 18:20:23  
7 way to do that is to give them a setting like 18:20:26  
8 [REDACTED] unless I've 18:20:29  
9 [REDACTED] it.'" 18:20:31

10 Do you see that? 18:20:32

11 A. I see that on the screen, yes. 18:20:33

12 Q. And as you testified earlier, that's the 18:20:35  
13 type of setting that Facebook could have 18:20:37  
14 technically implemented had it chosen to do so. 18:20:40

15 A. Let me just read the statement to make 18:20:44  
16 sure I can answer accurately for you. 18:20:46

17 (Reviewing document.) 18:21:00

18 THE WITNESS: There's a lot of context 18:21:19  
19 here to unpack. So I'm just trying to understand 18:21:21  
20 what David Poll is speaking about. 18:21:24

21 So my understanding is that the "apps 18:21:38  
22 others use" setting was partly delivered on the 18:21:41  
23 expectation that -- that David is referring to 18:21:51  
24 here. 18:21:54

25 So it would have been technically possible 18:21:59

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1 to allow a user to choose whether or not an 18:22:01  
2 application had access to their data. 18:22:10  
3 BY MR. LOESER: 18:22:14  
4 Q. All right. We've talked a bit about 18:22:20  
5 the -- I'm sorry, go ahead. 18:22:22  
6 A. Sorry. Carry on. 18:22:25  
7 Q. Okay. So moving on, the -- I've asked you 18:22:26  
8 some questions about the different permissions, and 18:22:28  
9 you've provided some helpful information about the 18:22:31  
10 terminology used to discuss different permissions. 18:22:33  
11 I do want to make sure I have a complete 18:22:37  
12 understanding of all of the different permissions 18:22:40  
13 that allowed access to friend information. 18:22:44  
14 And I asked before if a number of the 18:22:48  
15 permissions had the word "friends" in them, and you 18:22:52  
16 said "Yes." 18:22:56  
17 And it's also the case the number of 18:22:57  
18 permissions that provided access to friend 18:22:59  
19 information did not have the word "friend" in them. 18:23:02  
20 Is that right? 18:23:05  
21 A. There were permissions that allowed an app 18:23:08  
22 to access information about a user and that user's 18:23:11  
23 friends that didn't have "friend" in the title. 18:23:17  
24 Q. Okay. And I'm going to run through some, 18:23:22  
25 and then you can help me understand if there are 18:23:24

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1 others. 18:23:26

2 User-posts APIs are a type of -- emit 18:23:27

3 friend information. Right? 18:23:37

4 A. The user-posts API allowed an app to 18:23:38

5 access the posts of a user who had authorized the 18:23:42

6 application. 18:23:46

7 Q. And did it also provide access to the 18:23:48

8 user's friends' posts? 18:23:52

9 A. My understanding is the user-posts 18:23:56

10 permission is no. It would not have allowed an app 18:24:01

11 to access a user's friends' posts. 18:24:04

12 Q. And even where the friend responds to the 18:24:08

13 post or comments or indicates a like to a post? 18:24:10

14 A. My understanding of the way the user posts 18:24:16

15 permission worked was that it would have emitted 18:24:19

16 the posts of the user who had authorized the 18:24:23

17 application. It may have also included likes and 18:24:26

18 comments on that post. 18:24:29

19 Q. Okay. And likes and comments from a 18:24:32

20 friend would be friend information. Right? 18:24:34

21 A. Some posts, if they had only been shared 18:24:43

22 with a friend and they had been liked or commented 18:24:47

23 on by a friend, then the -- the app would be able 18:24:50

24 to see the user ID and the comment and some other 18:24:57

25 information about the comment that you could 18:25:02

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1	construe as having been made by a friend.	18:25:05
2	Q. Okay. And the Event API, is that a	18:25:08
3	similar answer to that; that the Event API gives	18:25:13
4	access to events that the user attended, but any	18:25:18
5	comment or posts or other information from the	18:25:21
6	friend regarding that event, that also would be	18:25:24
7	accessible for the user's friends. Right?	18:25:28
8	A. So, again, the specifics really matter	18:25:35
9	here.	18:25:37
10	The user events permission allowed an app	18:25:38
11	to access the events that a user, as I understand	18:25:41
12	it, had marked themselves as attending or not	18:25:45
13	attending or had responded to in some way.	18:25:48
14	Through that -- through the Events API,	18:25:56
15	the app could also access other information about	18:25:58
16	that event which may have included other attendees,	18:26:01
17	some of whom might be the user's friends, some of	18:26:05
18	whom might not be, depending on the privacy setting	18:26:09
19	of the event and who was attending.	18:26:14
20	Q. Okay. And so the Events API also could	18:26:15
21	obtain some friends information for those reasons.	18:26:19
22	A. The events API may have allowed an app to	18:26:23
23	access information about a user's friends who were	18:26:29
24	attending an event that the user was attending, for	18:26:33
25	example.	18:26:39

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1 Q. What is the "Pages API"? 18:26:42

2 A. The Pages API refers to a collection of 18:26:45

3 APIs that would allow an application to access 18:26:48

4 content on or information about a Facebook page. 18:26:52

5 Q. And could that API also allow access to 18:26:58

6 friends information of the user who used the app 18:27:03

7 with access to that API? 18:27:07

8 A. So the Pages API allowed an application to 18:27:12

9 access information about the page. At times, it 18:27:21

10 also allowed the application to access posts on 18:27:24

11 that page's timeline, and those posts could also 18:27:26

12 have included comments on those posts. And those 18:27:31

13 comments were publicly available on Facebook and 18:27:38

14 may have been also available by the API. 18:27:41

15 Q. And so that would include friends 18:27:44

16 information as well. Right? 18:27:46

17 A. The Pages API could be called by an 18:27:49

18 application without a specific logged-in user, and 18:27:52

19 so the information available may have included 18:28:00

20 friend information. 18:28:03

21 Q. And what is the "Groups API"? 18:28:06

22 A. The Groups API refers to a collection of 18:28:12

23 APIs which allow an app to access the groups that a 18:28:15

24 user is a member of. 18:28:21

25 Q. And could the Groups APIs also provide 18:28:26

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1 access to information about friends of the app 18:28:31

2 user? 18:28:34

3 A. The Groups API would have allowed the app 18:28:37

4 to access the member list of a -- that at the time 18:28:42

5 included the member list of the groups that the 18:28:49

6 user was a member of and posts in the group that 18:28:51

7 the user was a member of. 18:28:53

8 The member list could include people who 18:28:57

9 were the app user's friends. 18:28:59

10 Q. And it could also include people who were 18:29:02

11 not the app user's friends. Right? 18:29:04

12 A. A group on Facebook can be open or closed 18:29:08

13 and secret and may contain people who are not the 18:29:14

14 user's friends, and the group's API would have 18:29:16

15 allowed the app to see the members of the group. 18:29:21

16 Q. Are you familiar with the Taggable Friends 18:29:25

17 API? 18:29:27

18 A. I am familiar with the Taggable Friends 18:29:31

19 API. 18:29:33

20 Q. And what information does that API provide 18:29:34

21 access to? 18:29:37

22 A. My understanding is that the Taggable 18:29:39

23 Friends API retrieved -- allowed an app to retrieve 18:29:43

24 a very limited set of information about the app 18:29:48

25 user's friends specifically to enable them to 18:29:51

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1 render a tagging type-ahead. 18:29:55

2 Q. And what is a "tagging type-ahead"? 18:30:01

3 A. I think the best way to illustrate this is 18:30:04

4 through an example. 18:30:06

5 Imagine that you are a runner and you use 18:30:07

6 Strava, and you go on a run with me, but I am not a 18:30:13

7 Strava user. I track my runs using another app. 18:30:20

8 After the run, you might choose to share 18:30:25

9 your run back to Facebook, and you want to tag me, 18:30:29

10 one of your Facebook friends, in that story because 18:30:33

11 we went on the run together. 18:30:36

12 If I don't use Strava, then there was the 18:30:39

13 desire to give the app away to render a way for you 18:30:46

14 to tag me in that story when it was published back 18:30:53

15 to Facebook. 18:30:56

16 Q. Okay. So in that context, it provides 18:30:59

17 friend information about the person who doesn't use 18:31:03

18 Strava. 18:31:06

19 A. It provides a very, very limited set of 18:31:07

20 information about the person -- the user's friend 18:31:10

21 who doesn't use Strava. 18:31:13

22 Q. And we talked a bit about the Social 18:31:25

23 Context API. And you described that as an API that 18:31:27

24 provided information about a user and one other 18:31:32

25 person. 18:31:34

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1 Do I recall that correctly? 18:31:36

2 A. That's not the intent of my testimony. 18:31:37

3 It provided the social -- it provided 18:31:43

4 social context between two app users. 18:31:46

5 So when you called the Social Context API, 18:31:50

6 it was called on behalf of a user, and you would 18:31:53

7 also specify one of that user's friends who was 18:31:56

8 also -- or another user ID of somebody who was 18:32:01

9 using the application, and the API would return 18:32:04

10 social context between those two people. 18:32:07

11 Q. And so could that API provide information 18:32:15

12 about people who are not using the app with access 18:32:18

13 to Social Context API? 18:32:22

14 A. My understanding is the information 18:32:24

15 returned by that API would be different whether or 18:32:26

16 not two users -- one of the users was using the 18:32:28

17 application and one of the users displayed in the 18:32:32

18 Social Context wasn't. 18:32:36

19 Q. And so walk me through what happens when 18:32:39

20 the -- the other person is not using the app. 18:32:44

21 What information about that person is 18:32:49

22 provided through the app? 18:32:51

23 A. I'd need to refer to the API documentation 18:32:53

24 at the time to give -- to give you specifics, but 18:32:56

25 my understanding is it would return a very limited 18:32:59

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1 set of information about people that the two users 18:33:04  
2 had in common that were not using the application. 18:33:09  
3 Q. Okay. So let's -- let's -- let me provide 18:33:12  
4 an example. Maybe this would be helpful. 18:33:15  
5 So if a Facebook user watches a movie, 18:33:17  
6 let's say The Godfather, and the app that user 18:33:21  
7 is -- authorizes an app that has a Social Context 18:33:29  
8 API permission, what other information about people 18:33:34  
9 watching The Godfather, and from whom, would that 18:33:39  
10 API provide access? 18:33:43  
11 A. I can't -- I don't recall the specific 18:33:47  
12 behavior of the API, and I think to do that, I'd 18:33:49  
13 need to refer to the developer documentation that 18:33:52  
14 was available at the time as to how -- how that 18:33:54  
15 specific API behaved. I don't want to speculate if 18:33:57  
16 I don't have the -- the facts. 18:34:01  
17 Q. Well, let's try and create enough facts so 18:34:04  
18 you can provide some helpful information. 18:34:06  
19 Let's say a user did watch the movie 18:34:08  
20 Godfather and posts on their Facebook page, "I love 18:34:11  
21 the movie Godfather. I just watched it." 18:34:15  
22 Explain to me how the Social Context API 18:34:20  
23 would use that information and with whom it would 18:34:23  
24 use it if there's an app that has Social Context 18:34:26  
25 API. 18:34:29

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1           A. So I need to refer to the specifics about           18:34:30  
2           the -- how the social context API works. You're           18:34:33  
3           asking a very -- a question that requires, you           18:34:36  
4           know, a detailed answer, and I don't have in my           18:34:40  
5           mind the exact behavior of how the Social Context           18:34:42  
6           API worked and the context in which it worked and           18:34:47  
7           the specifics of the information that would have           18:34:51  
8           been returned by the API.           18:34:53

9           Q. Okay. Well, then, if you can, describe           18:34:56  
10          more generally -- and I'm trying to understand from           18:34:58  
11          where the Social Context API draws information.           18:35:02

12                 So I know from what you said that it draws           18:35:05  
13          information from the user who authorized the app.           18:35:07

14                 And what other information does it draw           18:35:10  
15          that pertains to that user? Like -- or from who?           18:35:13  
16          Who else would be sort of folded into the -- or who           18:35:17  
17          else would be in the net that that API casts?           18:35:20

18           A. The precise answer depends on the           18:35:25  
19          specifics of the Social Context API. It's one of           18:35:29  
20          the APIs that I don't have the details of exactly           18:35:31  
21          how it worked -- in my head today -- so it's hard           18:35:34  
22          to give you a specific answer to that accurately.           18:35:38

23           Q. Okay. But there's -- as you mentioned,           18:35:43  
24          there's a source -- there's a place you can go at           18:35:45  
25          Facebook where you can see and learn exactly what           18:35:48

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1 information that API provides access to? 18:35:51

2 A. My understanding is that the code base of 18:35:55

3 Facebook may help understand which API specifically 18:35:59

4 you're referring to and its behavior over time. 18:36:04

5 Q. And based upon what you know now, can you 18:36:09

6 say whether that API provides access to friends 18:36:12

7 information? 18:36:16

8 A. I -- again, to answer that question 18:36:19

9 specifically, I'd need to go and look at the exact 18:36:22

10 behavior of the Social Context API. There are 18:36:25

11 other APIs whose behavior I can describe. The 18:36:28

12 Social Context API, I -- I don't have the 18:36:31

13 information as to, like, exactly which API you're 18:36:34

14 referring to, exactly how it behaved, and exactly 18:36:37

15 who it was available to and when. 18:36:43

16 So I just don't want to give you incorrect 18:36:46

17 information. 18:36:49

18 Q. Well, that's fair, and I appreciate that 18:36:50

19 answer. 18:36:51

20 Do you know of or can you provide any 18:36:52

21 other APIs that provided access to friend 18:36:54

22 information? 18:36:59

23 And let me make your answer easier. Other 18:37:00

24 than those that have the word "friends" in the -- 18:37:03

25 A. When you're referring to friends 18:37:07

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1 information here, can you be more specific 18:37:09

2 precisely what information -- what would classify 18:37:12

3 as friends information in your question? 18:37:15

4 Q. Yeah, and I'm trying to use the definition 18:37:17

5 we came up with before. But it's really any 18:37:19

6 information about the friends -- any Facebook data 18:37:22

7 or information about the friends of the person who 18:37:24

8 authorized the app. 18:37:26

9 A. Okay. Cool. 18:37:32

10 Some other APIs that -- that would have 18:37:36

11 been -- that fit that description, there is an API 18:37:38

12 called a "Taggable Friends API" that you've 18:37:46

13 previously mentioned. There was another one called 18:37:51

14 the "Invisible Friends API." 18:37:54

15 And then the -- several of the user 18:38:01

16 permissions, user\_posts, user\_photos, user\_videos, 18:38:08

17 as per my previous testimony, would have allowed 18:38:20

18 the app to access the user's photos, but comments 18:38:23

19 and likes on those photos by my friends may also 18:38:28

20 have been returned by that API. 18:38:33

21 Q. And you said "photos," but that would be 18:38:36

22 the same for videos as well? 18:38:38

23 A. The user photos and user videos APIs 18:38:41

24 behaved the same way, to my knowledge -- or in a 18:38:47

25 similar way, to my knowledge. 18:38:50

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1 Q. And do you know, with regard to those user 18:38:52  
2 permissions, what time period they were active on 18:38:56  
3 the Platform? 18:38:58

4 A. The permissions, as I understand it, were 18:39:00  
5 added in April 2010, in terms of the permissions 18:39:03  
6 themselves. 18:39:08

7 The behavior of the APIs that were gated 18:39:11  
8 by those permissions changed over time. So it's 18:39:16  
9 hard to say exactly when the behavior changed, but 18:39:20  
10 the permissions that those -- those specific 18:39:23  
11 permissions were made available, as I understand 18:39:27  
12 it, in April 2010. 18:39:29

13 MR. BLUME: I'm sorry to -- when you're at 18:39:32  
14 a breaking point, if we could break. 18:39:34

15 MR. LOESER: Yeah. One more question. 18:39:36

16 Q. Those permissions, the user permissions 18:39:38  
17 you just described, are they still available on the 18:39:41  
18 Platform today? 18:39:44

19 A. My understanding is that some of those 18:39:47  
20 permissions are still available today, but I would 18:39:49  
21 want to review the public API documentation to be 18:39:54  
22 sure. 18:39:58

23 MR. LOESER: And I apologize, Mr. Blume, I 18:39:59  
24 just have two more questions that relate to this. 18:40:01  
25 If that's okay, I'll ask -- 18:40:04

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1 MR. BLUME: Okay. 18:40:06

2 BY MR. LOESER: 18:40:06

3 Q. Now, we've gone through a number of 18:40:07

4 different APIs, and I have attempted to elicit 18:40:08

5 information about all the APIs that provide access 18:40:11

6 to friend information as we've defined that. 18:40:13

7 Is there a tool or is there a list or a 18:40:16

8 database or something at Facebook that identifies 18:40:19

9 every single API that provides friend information 18:40:22

10 in any way? 18:40:28

11 A. I'm not aware of a tool that identifies 18:40:33

12 the subset of the Facebook Developer Platform APIs 18:40:38

13 that would have returned information about a user's 18:40:42

14 friends. 18:40:47

15 Q. And do you know if, at any point, Facebook 18:40:49

16 has undertaken the effort to identify every single 18:40:51

17 API that emitted friend information? 18:40:55

18 A. I'm aware of an effort in around 2018 that 18:40:59

19 was undertaken to assess the Facebook Platform and 18:41:06

20 the Facebook APIs and determine what information 18:41:12

21 was made available by those APIs. 18:41:17

22 Q. And do you know if that effort looked at 18:41:22

23 all of the different APIs that I just ran through 18:41:25

24 with you: Taggable Friends, Invisible Friends, 18:41:29

25 User Permissions, Groups, Events, Posts, and the 18:41:33

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1           like? 18:41:36

2           A. My understanding is that effort would have 18:41:38

3           looked through all of the APIs that were commonly 18:41:40

4           available on the Facebook developer endpoint 18:41:42

5           platform at the time. 18:41:45

6           Q. My last question, then we can take a 18:41:47

7           break: 18:41:49

8           Facebook can determine definitively with 18:41:50

9           respect to every API whether that API emitted any 18:41:53

10          friend information. Right? 18:41:57

11          A. My understanding is that for a given API 18:42:02

12          method, it is determinable what information would 18:42:06

13          have been emitted by that API. 18:42:10

14          MR. LOESER: Okay. We can take a break 18:42:14

15          now. Thank you for continuing on until we finished 18:42:16

16          that topic. 18:42:19

17          THE VIDEO OPERATOR: Okay. Then we're off 18:42:21

18          the record at 6:42 P.M. 18:42:23

19          (Recess from 6:42 P.M. to 7:00 P.M.) 18:42:25

20          THE VIDEO OPERATOR: We're back on the 19:00:38

21          record at 7:00 P.M. 19:00:39

22          MR. LOESER: Mr. Cross, we're going to put 19:00:44

23          up another exhibit for you. It's previously been 19:00:45

24          marked Exhibit 98. 19:00:48

25          And while it's being loaded, this appears 19:00:55

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1 to be a post from you on the internal group app 19:00:58

2 review and policy enforcement feedback and 19:01:03

3 questions on June 11, 2015. Is that right? 19:01:05

4 A. I'm not seeing anything on the screen just 19:01:14

5 yet. Or in the Veritext Egnite thing. 19:01:16

6 (Previously marked Exhibit 98 was 19:01:21

7 presented to the witness.) 19:01:26

8 MR. BLUME: Do you have an exhibit number? 19:01:28

9 MR. LOESER: Yeah, it's Exhibit Number 98. 19:01:30

10 THE WITNESS: I'm just going to quickly 19:01:39

11 turn on the lights in my room. It's getting dark 19:01:41

12 here. 19:01:45

13 Okay. I'm seeing something now. Thank 19:01:50

14 you. 19:01:52

15 BY MR. LOESER: 19:01:54

16 Q. And do you see the exhibit stamp 98? 19:01:54

17 A. I do. 19:01:58

18 Q. Okay. And then if you look at the top of 19:01:59

19 the next page, it says "App Review and Policy 19:02:01

20 Enforcement Feedback and Questions." 19:02:04

21 A. I see that, yes. 19:02:09

22 Q. And what -- is this a -- like, what is 19:02:11

23 this? 19:02:13

24 Where was this posted? 19:02:15

25 A. I can't confirm where this was posted from 19:02:20

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1        what I'm seeing here. It's -- yeah. I -- from 19:02:23

2        what I'm seeing on the screen, I can't 100 percent 19:02:27

3        confirm where this -- where this was posted. 19:02:30

4            Q. Okay. And in June of 2015, what was your 19:02:34

5        position at Facebook? 19:02:36

6            A. I was a product manager on the Facebook 19:02:39

7        Developer Platform. 19:02:42

8            Q. Okay. And was there a list serve or 19:02:45

9        something that was -- where people provided 19:02:48

10       feedback and questions for app review and policy 19:02:52

11       enforcement? 19:02:55

12            A. There was likely a Facebook group. We 19:02:57

13       used Facebook internally to discuss that. That's 19:02:59

14       what this may be. I just can't 100 percent confirm 19:03:03

15       it from what I'm looking at here. 19:03:06

16            Q. Okay. And if you look at just your post 19:03:09

17       starting at the top, it refers to something called 19:03:13

18       "██████████" 19:03:16

19            But before I ask you questions about that, 19:03:20

20       there's a link below that. 19:03:23

21            Can you tell what that link is? 19:03:25

22            A. That looks to me like a -- what, a URL to 19:03:31

23       an image of -- first of all, that's what it looks 19:03:39

24       like to me. I can't confirm if that URL is the URL 19:03:42

25       for the image directly below it. It's possible, 19:03:47

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1 but I can't confirm that. 19:03:52

2 Q. Okay. Well, let's look at your -- your 19:03:54

3 post. It says: 19:03:57

4 "This app, [REDACTED] -- and I'm 19:03:59

5 skipping the numbers -- "is blowing up: [REDACTED] to 19:04:02

6 [REDACTED] MAU in 17 days." 19:04:06

7 Do you see that? 19:04:09

8 A. I see that on the screen, yeah. 19:04:09

9 Q. And below that, you write: 19:04:11

10 "They're accessing [REDACTED] 19:04:13

11 [REDACTED] - and looking at the people 19:04:15

12 (non-app friends) who [REDACTED] on 19:04:18

13 them." 19:04:21

14 And so when you use the expression 19:04:22

15 "non-app friends" here, what are you referring to? 19:04:26

16 A. I'm referring to people who are friends of 19:04:30

17 the user who's authorized the application who have 19:04:36

18 not yet authorized the application themselves. 19:04:41

19 Q. Okay. So in -- on June 11, 2015, this app 19:04:45

20 called "[REDACTED] was obtaining friend 19:04:52

21 information. Correct? 19:04:55

22 A. My understanding from reading this is I 19:05:00

23 was -- I thought it was accessing information about 19:05:02

24 people who had [REDACTED] on the [REDACTED] 19:05:13

25 [REDACTED] of people who had used the 19:05:17

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1 application. 19:05:20

2 Q. Okay. And then you write: 19:05:21

3 "To me, while technically possible, seems 19:05:23

4 like it violates spirit of the V2 changes and 19:05:26

5 the intended use of user\_posts and 19:05:30

6 user\_photos -- which is about deriving 19:05:33

7 user-value from the content, not the people 19:05:36

8 who like/comment on the content." 19:05:38

9 Did I read that correctly? 19:05:41

10 A. You read that correctly. 19:05:43

11 Q. And "V2," is that a reference to Graph API 19:05:45

12 Version 2? 19:05:47

13 A. That would be a reference to Graph API 19:05:48

14 Version 2. 19:05:50

15 Q. And tell me what you mean when you say 19:05:52

16 that it "seems like it violates spirit of the V2 19:05:54

17 changes and the intended use of user\_posts and 19:05:58

18 user\_photos." 19:06:01

19 A. So the intended use, as I understand it, 19:06:06

20 and user\_posts and user\_photos was to grant apps 19:06:08

21 the ability -- well, for users to be able to 19:06:12

22 authorize an application to access their user posts 19:06:15

23 and photos for some value that the application was 19:06:19

24 providing to users. 19:06:24

25 Q. Okay. And you thought that because user 19:06:29

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1 posts and user photos were emitting friend data and 19:06:31

2 Facebook had announced it had deprecated friend 19:06:34

3 data. Right? 19:06:38

4 A. So Facebook had announced it had -- it was 19:06:41

5 deprecating the friend permissions. That's what 19:06:44

6 Facebook announced as part of the API V1 changes. 19:06:49

7 So that's important to clarify. 19:06:55

8 Q. Okay. And -- but when you say that it 19:06:59

9 "violates the spirit of V2 changes," is what you're 19:07:04

10 saying here that it -- this app continues to obtain 19:07:07

11 friend information, and the spirit of the V2 19:07:11

12 changes was to stop that from happening? 19:07:14

13 A. Several of the changes in API V2, or the 19:07:20

14 suite of things that were launched along with API 19:07:26

15 V2, were about limiting the ability of applications 19:07:29

16 to access a user's friends' content and 19:07:36

17 information. 19:07:45

18 In this case, what's still available to 19:07:46

19 this application is the likes and comments made by 19:07:50

20 a user's friends on a user's timeline posts. 19:07:54

21 Q. Okay. And how does that violate the 19:08:08

22 spirit of the V2 changes? 19:08:10

23 A. The spirit of the V2 changes, as I 19:08:16

24 recall -- trying to remember what I wrote in this 19:08:19

25 post nearly seven or eight years ago -- is the apps 19:08:23

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1 would have less access to information about a 19:08:30

2 user's friends who were not using the application. 19:08:39

3 That was indeed behind any of the changes 19:08:45

4 in API V2; but in this case, the application was 19:08:51

5 still accessing some information about the user's 19:08:58

6 friends who had commented or liked on the original 19:09:02

7 post -- on the app-using user's posts. 19:09:05

8 Q. And so you expressed those concerns. 19:09:22

9 And do you recall whether this app 19:09:27

10 continued to have access to the user posts and user 19:09:30

11 photos after you expressed these concerns? 19:09:35

12 A. From reading the thread that continues 19:09:40

13 below -- below this, it looks like the conclusion 19:09:45

14 was reached that this activity was not against 19:09:48

15 policy as defined at the time, and this access -- 19:09:54

16 this use case should continue. 19:10:00

17 I don't recall -- I do not know what 19:10:05

18 happened to the app [REDACTED] over time. 19:10:08

19 Q. Now, Mr. Cross, there were thousands of 19:10:24

20 apps that had access to friend information. Is 19:10:26

21 that right? 19:10:28

22 A. Over what time period are you referring 19:10:35

23 to? 19:10:37

24 Q. Oh, that's a good question. 19:10:38

25 So prior to the introduction of Graph API 19:10:40

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1 Version 2, there were thousands of apps that had 19:10:43  
2 access to friend permissions. Right? 19:10:46

3 A. Prior to the introduction of API 19:10:49  
4 Version 2, any application on the Facebook 19:10:51  
5 Developer Platform could request the friend 19:10:53  
6 permissions from users. 19:10:56

7 Q. And Facebook evaluated the number of apps 19:10:59  
8 that had access to friend permissions as part of 19:11:04  
9 its preparation for the introduction of Graph API 19:11:08  
10 Version 2. Right? 19:11:12

11 A. In preparation for the changes launched on 19:11:15  
12 April 30, 2015, a number of initiatives were 19:11:18  
13 undertook to understand the potential impact of 19:11:24  
14 these changes on the developer ecosystem. 19:11:26

15 Q. And included in those initiatives was 19:11:31  
16 identifying the number of users who downloaded apps 19:11:34  
17 with access to friend information. Right? 19:11:37

18 A. Can you help me understand what you mean 19:11:40  
19 by "downloaded"? 19:11:41

20 Q. I'm sorry. Installed the apps. 19:11:43

21 A. My understanding is that one of the things 19:11:50  
22 that was looked at is the number of users who had 19:11:52  
23 granted one or more friend permissions to one or 19:11:56  
24 more applications. 19:11:59

25 Q. And as part of those initiatives as well, 19:12:01

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1 Facebook identified the number of API calls on the 19:12:05  
2 friend-sharing APIs. Right? 19:12:09

3 A. I would need to see, like, specific 19:12:16  
4 documentation there. 19:12:19

5 Like, recall there was no such thing as 19:12:21  
6 the friend APIs. There are friend permissions, and 19:12:25  
7 there are APIs, and those APIs can be called by the 19:12:29  
8 app-using user or on behalf of that app-using 19:12:32  
9 user's friends. 19:12:38

10 So, again, I want to make sure I'm giving 19:12:39  
11 you the right answer, given the specifics. 19:12:41

12 Q. I appreciate that. So let's speak in 19:12:43  
13 terms of friend permissions, then. 19:12:45

14 One of the things that Facebook can 19:12:47  
15 identify is the number of API calls on any of the 19:12:49  
16 permissions that are available on the Platform. 19:12:53  
17 Right? 19:12:56

18 A. So, again, the -- 19:13:00

19 Q. Or did I mix up the terminology -- the 19:13:01  
20 calls are referred to the APIs themselves, not the 19:13:03  
21 permissions. Is that right? 19:13:06

22 A. When you -- when you see a reference to 19:13:07  
23 "API calls," that's referring to APIs. 19:13:09

24 The permissions determine what information 19:13:12  
25 is available via those APIs. 19:13:15

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1                   So, yeah, those concepts are separate,                   19:13:18  
2           yeah.                   19:13:21

3           Q.   So Facebook can identify and did identify           19:13:21  
4           the number of API calls on the APIs that provided           19:13:24  
5           access to friend information.           19:13:30

6           A.   The -- the documents I've read show that           19:13:41  
7           there was an effort done to determine how API calls           19:13:45  
8           that were made by applications -- and some of the           19:13:50  
9           API calls -- some of the APIs would -- would           19:13:54  
10          specifically map to friend data; other API calls           19:13:59  
11          would not be specific to friend data.           19:14:03

12          Q.   And I appreciate that. And I'm trying to           19:14:08  
13          make sure I understand what Facebook knew about the           19:14:10  
14          use of APIs that provided access to friend           19:14:13  
15          information.           19:14:18

16                  And my understanding is that Facebook           19:14:18  
17          identified that thousands of apps installed by           19:14:20  
18          millions of users made millions of calls on           19:14:24  
19          friend-sharing APIs. Is that a fair statement?           19:14:27

20          A.   No. The -- the friend-sharing API part of           19:14:31  
21          that doesn't map with my understanding of how the           19:14:36  
22          platform worked.           19:14:39

23                  If you could show me a document that           19:14:40  
24          states that, that might be helpful for me to           19:14:42  
25          analyze.           19:14:45



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1 Q. Yeah. And we'll get into a document 19:14:47  
2 that -- 'cause as you say, there were various 19:14:49  
3 initiatives that studied the extent to which friend 19:14:52  
4 information was made available by apps via APIs 19:14:56  
5 that provided access to that information. Okay. 19:15:01  
6 Right? 19:15:05

7 A. There were a number of studies done to 19:15:05  
8 analyze the use of the Platform by developers and 19:15:08  
9 how they were using the Platform and which 19:15:12  
10 permissions they were requesting and which APIs 19:15:15  
11 they were -- they were calling. 19:15:17

12 Q. And deprecating -- and I hope I'm using 19:15:20  
13 the terminology right -- but deprecating friend 19:15:24  
14 permissions, that was a thing. Right? 19:15:27

15 A. In API Version 2, the friend permissions 19:15:31  
16 were not readily grantable by a user using an 19:15:35  
17 application that was using API Version 2. 19:15:40

18 Q. And that was a big change at Facebook 19:15:44  
19 because thousands of apps had access to the APIs 19:15:46  
20 that allowed friend-sharing. Right? 19:15:52

21 A. The way that the Facebook Developer 19:16:01  
22 Platform worked before API Version 2 allowed any 19:16:03  
23 application to request friend permissions, and a 19:16:08  
24 number of applications did so. 19:16:14

25 And so the removal of those permissions 19:16:17

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1 from the public API surface area in API Version 2, 19:16:21  
2 yes, was considered a significant change to the 19:16:27  
3 Facebook Developer Platform. 19:16:30  
4 MR. LOESER: If we could go to Tab 8. 19:16:35  
5 (Deposition Exhibit 334 was marked for 19:17:10  
6 identification.) 19:17:12  
7 MR. LOESER: This is Exhibit 334. The 19:17:15  
8 Bates number on this is 01685319.ppt. 19:17:20  
9 Q. Is that right? 19:17:26  
10 And, Mr. Cross, do you see what's on your 19:17:28  
11 screen? 19:17:30  
12 A. I do. 19:17:30  
13 Q. And this is -- you can take a minute to 19:17:32  
14 skim through it. I just have a few questions about 19:17:36  
15 this slide deck. And the first page says: "Login 19:17:39  
16 V4 (+PS12n) - 1/24/2014 update." 19:17:42  
17 Can you describe what this refers to just 19:17:49  
18 by looking at the title of it? 19:17:55  
19 A. "Login V4" refers to the update to the 19:17:57  
20 Facebook Platform Login dialogue that were launched 19:18:00  
21 in -- as part of the changes announced on 19:18:06  
22 April 30, 2014. So that's what "Login V4" refers 19:18:10  
23 to. 19:18:16  
24 And "PS12n" refers to a term called 19:18:16  
25 "platform simplification," which was one of the 19:18:20

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1 terms used as part of the work that led up to the 19:18:23  
2 changes that were announced in -- on April 30, 19:18:30  
3 2014. 19:18:34

4 Q. Okay. And if you -- if you turn to the 19:18:37  
5 next page of that slide deck, there's an "Overview" 19:18:41  
6 slide which describes the content of this 19:18:47  
7 presentation. 19:18:51

8 And it states, Number 1: "[REDACTED] [REDACTED] 19:18:53  
9 [REDACTED]. " 19:18:56

10 Number 2: "Many [REDACTED] changes." 19:19:00

11 And Number 3: "Limited '[REDACTED] 19:19:02  
12 [REDACTED] 19:19:04

13 Did I read that correctly? 19:19:05

14 A. You read that correctly. 19:19:06

15 Q. And we've discussed user trust. 19:19:07

16 What does "developer trust" refer to? 19:19:10

17 A. "Developer trust" refers to how Facebook 19:19:14  
18 thought about its relationship with its platform 19:19:17  
19 developers; whether or not those developers would 19:19:21  
20 be keen to continue developing integrations with 19:19:27  
21 the Facebook Developer Platform. 19:19:31

22 Q. And why did Facebook want developers to do 19:19:33  
23 that? 19:19:36

24 A. If you're building a developer platform, 19:19:40  
25 you typically want developers to build for your 19:19:43

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1 developer platform. 19:19:46

2 Q. And what does Facebook gain from that? 19:19:48

3 A. Facebook gained a number of things from 19:19:55

4 its Developer Platform, various different types, 19:19:56

5 depending on the functionality of the app provided. 19:20:03

6 Q. Okay. Are there a couple of main 19:20:08

7 priorities? 19:20:11

8 A. One example would be allowing apps that 19:20:15

9 would -- users using applications where users would 19:20:22

10 share content or activity in their applications 19:20:26

11 back to Facebook so that it could be seen on 19:20:31

12 Facebook by that user's friends on that Newsfeed. 19:20:33

13 Q. And did Facebook, then, have an appetite 19:20:38

14 for more information because it utilized that 19:20:42

15 information in its Advertising Platform? 19:20:44

16 A. I haven't prepared to talk about how the 19:20:51

17 advertising systems work. That's -- that's not my 19:20:54

18 area of expertise in general, and it's not 19:20:57

19 something I prepared in this -- to testify on. I 19:21:01

20 understand there are other people doing that. 19:21:04

21 My understanding of the reason why we were 19:21:09

22 keen for apps to share contact back to Facebook is 19:21:13

23 that that would result in content on Facebook that 19:21:18

24 could be viewed in Newsfeed that people could like 19:21:21

25 and comment and reshare. 19:21:24

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1 Q. And -- and you're not knowledgeable about 19:21:26  
2 whether it was also -- that information was used 19:21:29  
3 to -- for the benefit of the targeted advertising 19:21:32  
4 systems? 19:21:36

5 A. I am not an expert in how Facebook's 19:21:38  
6 targeted advertising systems work or what 19:21:41  
7 information is used to inform how ad-targeting 19:21:43  
8 works. 19:21:48

9 Q. And the last thing on Number 1 is "protect 19:21:49  
10 the graph." 19:21:53

11 Can you explain what that means? 19:21:54

12 A. My understanding of "protect the graph" is 19:21:59  
13 about limiting the amount of information third 19:22:06  
14 parties have about users who authorize their 19:22:10  
15 application and their relationships to each other. 19:22:19

16 Q. Okay. If you could turn to page 6 of this 19:22:24  
17 slide deck -- and it doesn't have page numbers on 19:22:28  
18 it, so we'll flip to the sixth page and tell you, 19:22:31  
19 "This is the sixth page." 19:22:34

20 Do you see the slide on the screen now? 19:22:36

21 A. I do. 19:22:40

22 Q. And do you see the title of that slide? 19:22:41

23 A. I do. 19:22:44

24 Q. And what does it say? 19:22:46

25 A. It says: "User of high-value perms." 19:22:48

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1 Q. And what are "high-value perms"? 19:22:53

2 A. I -- I don't know what high-value perms 19:22:57

3 are in a general context. The slide includes a 19:23:04

4 number of permissions that were available on the 19:23:07

5 Facebook Developer Platform, and this slide is by 19:23:10

6 inference calling those "high-value perms." 19:23:15

7 But I can't say today exactly what 19:23:18

8 "high-value perms" means in general. 19:23:20

9 Q. And what is Facebook's definition of 19:23:24

10 "high-value perms"? 19:23:27

11 And I assume that's the permissions. So 19:23:30

12 high-value permissions? 19:23:32

13 A. I'm not aware of Facebook having a 19:23:34

14 definition of "high-value perms" that's general and 19:23:35

15 commonly used. This seems to be a set of 19:23:38

16 terminology created by the author of this deck. 19:23:43

17 Q. Okay. And, based upon this slide, the 19:23:48

18 following permissions were identified as high-value 19:23:54

19 permissions, and those are: "Friends; 19:23:57

20 read\_mailbox; read\_requests; read\_friendlists; 19:24:01

21 manage\_notifications; manage\_friendlists; and 19:24:06

22 "create\_event." 19:24:12

23 Is that right? 19:24:13

24 A. I see "manage\_notifications," but I don't 19:24:14

25 see "manage\_events" listed here, either on your or 19:24:17

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1 on mine. 19:24:24

2 Q. Yeah, we're trying to shrink the -- well, 19:24:25

3 as we're working this out, I'll represent to you 19:24:30

4 that there are a couple more rows that you can't 19:24:33

5 see, and they include "manage\_friendlists; 19:24:36

6 create\_events," and there's even a couple that I 19:24:39

7 can't see. 19:24:42

8 But nonetheless, what I read through, 19:24:43

9 those are -- the first column of this slide 19:24:45

10 identifies what the -- what are described as 19:24:48

11 [REDACTED] Right? 19:24:52

12 A. Well, I can see on the slide the number of 19:24:58

13 permissions that the author of this deck has 19:25:01

14 somehow categorized as "[REDACTED]" 19:25:04

15 But, like I said, this isn't -- this 19:25:07

16 doesn't resonate to me as a -- as a general 19:25:09

17 classification that was widely used. 19:25:13

18 Q. And then if you go to the second column of 19:25:16

19 this spreadsheet, it says: "Total number of apps 19:25:19

20 requesting these permissions a day." Is that 19:25:23

21 right? 19:25:26

22 A. That's what I see in the column header, 19:25:28

23 yeah. 19:25:30

24 Q. And so earlier, I was asking you questions 19:25:32

25 to try and get a scope -- understand the scope of 19:25:34

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1 friend-sharing use in particular. 19:25:38

2 And according to this, as of the time of 19:25:42

3 this deck, which was -- looks like 1/24/2014, there 19:25:46

4 were [REDACTED] apps requesting friends permissions per 19:25:51

5 day. Right? 19:25:57

6 A. My understanding from this is what it's 19:26:01

7 saying is that there were around [REDACTED] apps 19:26:03

8 requesting one or more friend permissions on any 19:26:07

9 given day -- on -- on a day. 19:26:12

10 It's not clear from what I'm seeing here 19:26:16

11 whether or not that was an average or what 19:26:19

12 particular day or from what time period that data 19:26:21

13 was collected, to be clear. 19:26:23

14 Q. And earlier you talked about various 19:26:27

15 initiatives that Facebook undertook before 19:26:29

16 implementing the new version of the graph. 19:26:32

17 And does this appear to be one of the 19:26:35

18 evaluations that Facebook did of the extent of the 19:26:37

19 use of various permissions that were going to be 19:26:40

20 deprecated? 19:26:44

21 A. Given my understanding of the -- of the 19:26:48

22 date of this slide deck, given it was before the 19:26:50

23 changes were announced and the data contained 19:26:54

24 within, it seems reasonable that this is an output 19:26:57

25 of some of the analysis that was done to understand 19:27:03

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1 the scale of the apps using to-be-deprecated 19:27:07

2 permissions, including the friend permissions. 19:27:14

3 Q. And let's go to the next slide. 19:27:18

4 This slide is called "Key apps," and it 19:27:21

5 has a number of different categories of key apps in 19:27:24

6 the first column, starting with [REDACTED] 19:27:29

7 and it shows there's [REDACTED] apps. 19:27:33

8 What are "[REDACTED]" 19:27:35

9 What apps are those? 19:27:37

10 A. I have -- I do not know which apps are 19:27:40

11 being referred to here, like, which apps are the 19:27:44

12 number -- which represent the [REDACTED] and I also don't 19:27:47

13 know how that number was derived. 19:27:50

14 So I -- it's hard for me to -- I am unable 19:27:56

15 to -- to answer the question what -- what were 19:27:59

16 those apps or how were they categorized as [REDACTED] 19:28:04

17 [REDACTED] 19:28:08

18 Q. And where would Facebook go to identify 19:28:08

19 the apps, the key apps, characterized as "[REDACTED]" 19:28:11

20 [REDACTED] 19:28:14

21 A. I don't know how this list was derived or 19:28:17

22 how it was derived or who derived it. 19:28:22

23 Q. And so if Facebook were asked to provide 19:28:27

24 an answer to what apps are [REDACTED] how 19:28:29

25 would Facebook answer that question? 19:28:32

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1           A. My first step would be to try and identify           19:28:40  
2           the author of the deck and to see if they are           19:28:43  
3           contactable and to attempt to determine if they           19:28:49  
4           recall how this determination was made.           19:28:52

5           Q. Is asking Mark perhaps one of the ways to           19:28:58  
6           find the answer to that as well?           19:29:00

7           A. I doubt Mark would know how this slide           19:29:02  
8           deck was prepared or what went into determining           19:29:05  
9           that number on the screen.           19:29:08

10          Q. And without having any commentary on the           19:29:11  
11          fact that Sheryl has more friends than Mark, where           19:29:14  
12          would one go to find out what key apps are Sheryl's           19:29:17  
13          friends?           19:29:21

14          A. Well, so first of all, you said there that           19:29:22  
15          Sheryl has more friends than Mark.           19:29:28

16                 The numbers here refer to apps, not           19:29:31  
17          friends, to be clear.           19:29:34

18                 And the same answer applies here, which is           19:29:35  
19          I -- I do not know how this slide deck was created           19:29:40  
20          or who created it or how they came to this           19:29:45  
21          determination. There's no evidence here of how           19:29:49  
22          that was determined.           19:29:54

23          Q. So I can tell you from the metadata that           19:29:55  
24          this is from Eddie O'Neil's custodial file.           19:29:57

25                 So does that suggest to you that you would           19:30:02

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1 ask -- if he's the author of this deck, you could 19:30:04

2 ask him how he came up with these numbers? 19:30:07

3 A. If he is indeed the author of the deck, 19:30:09

4 it's -- he could be asked. Whether or not he would 19:30:15

5 recall how these numbers were derived is a question 19:30:17

6 for him. 19:30:21

7 Q. Okay. And what is "Generating TPV"? 19:30:23

8 What is "TPV"? 19:30:27

9 A. TPV in this context refers to total 19:30:29

10 payment volume, which is the payments happening in 19:30:31

11 the games, as I understand it, that are being 19:30:39

12 referred to here. 19:30:44

13 Q. Okay. So this appears that when 19:30:47

14 evaluating the deprecation of certain permissions, 19:30:50

15 Mr. O'Neil identified key apps that were generating 19:30:55

16 TPV. Correct? 19:30:59

17 A. Sorry. Can you ask that again? I want to 19:31:02

18 make sure I -- 19:31:04

19 Q. Yeah, I'm just trying to understand -- 19:31:05

20 sorry, we're talking at the same time, which is my 19:31:07

21 fault. 19:31:10

22 But I'm trying to understand the -- this 19:31:10

23 appears to be an analysis of what APIs were going 19:31:12

24 to be deprecated, but also what apps would be 19:31:16

25 affected by those deprecations. Right? 19:31:20

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1 And so one of the categories here that 19:31:23  
2 appears was -- that was being evaluated was whether 19:31:24  
3 the app that could be impacted by deprecation was 19:31:27  
4 generating TPV. 19:31:32

5 Is that a fair read? 19:31:34

6 A. My understanding is this deck has referred 19:31:36  
7 to a range of potentially to-be-deprecated APIs and 19:31:38  
8 permissions -- sorry -- specifically, the previous 19:31:46  
9 slide refers to permissions that were at this point 19:31:49  
10 proposed to be deprecated, publicly -- not publicly 19:31:53  
11 available to developers anymore, and the "Key apps" 19:31:59  
12 slide is an attempt to quantify the number of apps 19:32:02  
13 that the author estimated to be impacted by those 19:32:05  
14 deprecations. 19:32:09

15 Q. And what -- is it "Neko"? Is that "Neko 19:32:12  
16 spenders"? 19:32:17

17 A. Neko or Neko, that refers to a product 19:32:18  
18 that is -- that came to be known as "Mobile App 19:32:24  
19 Install Ads." 19:32:27

20 Q. Okay. And what are "Neko spenders"? 19:32:31

21 A. So my understanding is that would refer to 19:32:36  
22 apps that were -- in some period of time had spent 19:32:38  
23 some money on mobile app install ads. 19:32:42

24 Q. And when you say "spend some money," what 19:32:47  
25 does that mean? 19:32:50

25	Is that consistent with your	19:34:14
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1 understanding? 19:34:16

2 A. My understanding is there were various 19:34:17

3 tiers of partners, Tier 0 being the top, Tier 1 19:34:20

4 being one below. 19:34:25

5 But again, I -- it's unclear. I am unable 19:34:27

6 to say what was -- why an app would be categorized 19:34:31

7 in Tier 0 versus Tier 1. 19:34:35

8 Q. And does Facebook classify its partners 19:34:38

9 differently based upon how much revenue Facebook 19:34:43

10 receives from the partner? 19:34:47

11 A. I don't know how the -- the tiering, as 19:34:53

12 represented here, was -- was determined. My 19:34:56

13 understanding is there would have been a range of 19:34:59

14 factors that would have gone into that tiering 19:35:01

15 determination. 19:35:06

16 Q. Now, my understanding of the -- of the 19:35:14

17 purpose of allowing an app to have access to friend 19:35:18

18 information was to use that information in the -- 19:35:22

19 solely in the context of the person who authorized 19:35:28

20 the app to obtain the information. 19:35:32

21 Is that your understanding? 19:35:34

22 A. My understanding is that the existence of 19:35:43

23 the ability for apps to access information about a 19:35:50

24 user who used the app and their friends was to 19:35:54

25 build an engaging social experience for that user. 19:35:59

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1 Q. And there were rules at Facebook, 19:36:03  
2 developer rules, that limited the use of friend 19:36:06  
3 information to the purpose you just described. Is 19:36:09  
4 that right? 19:36:12

5 A. There was a range of platform policies 19:36:15  
6 that developers -- it was a specific set of 19:36:17  
7 platform policies that the -- that developers of 19:36:20  
8 the Facebook app -- the developers of apps that 19:36:25  
9 used the Facebook Developer Platform would have to 19:36:27  
10 agree to. 19:36:32

11 Q. And so if an app gets access to friend 19:36:34  
12 data and then uses that information to target the 19:36:39  
13 friends of the app users with advertisements, that 19:36:41  
14 would be an example of an app using friend 19:36:46  
15 information in a way that is -- that violates 19:36:48  
16 Facebook's developer policies. Is that right? 19:36:52

17 MR. BLUME: Objection to scope. 19:36:55

18 THE WITNESS: Sorry. I haven't prepared 19:37:00  
19 to speak to Facebook's developer policies and 19:37:01  
20 precisely what they allowed or prohibited -- and 19:37:04  
21 also how Facebook's advertising ecosystem worked. 19:37:09

22 BY MR. LOESER: 19:37:15

23 Q. And based upon your knowledge of the 19:37:19  
24 platform, was my statement correct? 19:37:20

25 A. I -- I am not -- I'm not sure I can 19:37:24

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1 confirm exactly that -- that statement. I am not 19:37:33  
2 sure, as I sit here today, exactly what the 19:37:37  
3 policies were at any given time in the past. 19:37:39

4 Q. Okay. Let me ask one more related 19:37:46  
5 question. Perhaps this is something that you are 19:37:48  
6 familiar with. 19:37:50

7 If an app gets access to friend data and 19:37:51  
8 then sells that friend information to another third 19:37:53  
9 party, would that be an example of the app using 19:37:56  
10 friend information in a way that is not solely 19:37:59  
11 within the app user's experience? 19:38:03

12 A. If an app developer is making data 19:38:10  
13 available to another entity that isn't -- that -- 19:38:16  
14 it's hard -- yeah. 19:38:26

15 It's hard for me to, like, give a specific 19:38:27  
16 answer to that based on my understanding of how 19:38:29  
17 the -- of what was and wasn't okay in terms of the 19:38:33  
18 Facebook Developer Platform policies. 19:38:37

19 Q. Okay. But you described for me Facebook's 19:38:39  
20 understanding of how friend information was to be 19:38:43  
21 used, which was to create the experience between 19:38:45  
22 the user of the app and the app. Right? 19:38:48

23 A. So my answer there was referring to my 19:38:52  
24 understanding of the -- the primary reason why the 19:38:56  
25 Facebook Platform existed, which was to primarily 19:38:59



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1 allow developers to build engaging social 19:39:04  
2 experiences that users could interact with that was 19:39:08  
3 valuable to them. 19:39:11

4 Q. And Facebook did not intend in that 19:39:12  
5 context for apps to use friend information it 19:39:15  
6 obtained from a user outside of the context of the 19:39:18  
7 user's experience with that app. Right? 19:39:25

8 A. So there were a number of users -- uses of 19:39:29  
9 the Facebook Developer Platform where 19:39:33  
10 information -- often publicly available information 19:39:37  
11 about a user's activity would be available to an 19:39:40  
12 app developer without the user explicitly 19:39:43  
13 authorizing the application. 19:39:47

14 Q. And let's confine our answer to 19:39:53  
15 information obtained about a friend that was 19:39:55  
16 intended for friends only; that wasn't public. 19:39:57

17 And I'm just trying to understand kind of 19:40:01  
18 how friend-sharing works. It's not a trick 19:40:04  
19 question. I'm just trying to understand if an app 19:40:06  
20 obtains friend information but then uses that 19:40:08  
21 information for purposes other than the experience 19:40:10  
22 of the app user and the app, is that something that 19:40:12  
23 is beyond what Facebook intended when it provided 19:40:16  
24 access to the friend information? 19:40:20

25 A. So limited to -- limited to the context of 19:40:27

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1 a user having explicitly authorized an application 19:40:30  
2 and then that application having access to the -- 19:40:36  
3 the data made available via the friend permissions, 19:40:39  
4 my understanding is that the -- that that 19:40:43  
5 information was to be used within the context of 19:40:46  
6 the application that the user was using. 19:40:48

7 Q. Did Facebook have any technology making it 19:40:51  
8 impossible for apps to use friend data other than 19:40:54  
9 in connection with the app user? 19:40:58

10 A. One piece of technology Facebook has, or 19:41:06  
11 had, is the privacy settings available governing 19:41:11  
12 visibility of content on Facebook. 19:41:18

13 As a result, it's possible that, for 19:41:22  
14 example, if we were friends and you posted a post, 19:41:26  
15 you could make that post not visible to me, even 19:41:31  
16 though we were friends using on-Facebook privacy 19:41:36  
17 settings. 19:41:40

18 If you had done that, then that piece of 19:41:41  
19 content wouldn't be available via the API if it was 19:41:44  
20 being called on my behalf. 19:41:50

21 Q. Okay. And if you have shared information 19:41:52  
22 with your friend based upon your privacy setting 19:41:54  
23 that allowed friends to have that information, was 19:41:59  
24 there technology that prevented an app from -- 19:42:01  
25 could Facebook have utilized technology that would 19:42:07

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1 prevent that app from getting the friend 19:42:10

2 information since the app is not the friend of the 19:42:13

3 person who posted it? 19:42:15

4 A. So the -- again, which time frame are you 19:42:17

5 referring to here? 19:42:20

6 Q. At any point since 2007. 19:42:22

7 A. Okay. So once a -- once an app makes an 19:42:25

8 API call on behalf of a user and the Facebook API 19:42:32

9 returns that information to the application, then 19:42:38

10 the application or the developer, whether or not 19:42:44

11 that's their servers or the code, technically has 19:42:48

12 access to that information. 19:42:51

13 And once they have that information, 19:42:54

14 the -- there's very little -- there's no technical 19:42:57

15 way for Facebook to prevent it being used outside 19:43:01

16 the use of the application itself. 19:43:06

17 Q. Does Facebook perform financial analysis 19:43:17

18 of the different products it offers? 19:43:20

19 A. That's a very -- 19:43:25

20 Sorry, Rob, it looks like you were going 19:43:27

21 to say something. 19:43:30

22 MR. BLUME: I was just going to object to 19:43:31

23 the form. 19:43:33

24 THE WITNESS: Facebook as a company does 19:43:40

25 look at its various products and how they are 19:43:44

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1 performing. 19:43:47

2 BY MR. LOESER: 19:43:47

3 Q. Okay. And do the different products 19:43:48

4 engage in analysis of revenue and the income, 19:43:50

5 et cetera, of that product to -- to Facebook? 19:43:55

6 A. Different products assess their 19:44:01

7 performance in different ways. Ads products, for 19:44:02

8 example, typically would look at revenue as to 19:44:06

9 whether or not they were performing. 19:44:10

10 Q. And what about partnership-based products? 19:44:14

11 Are there partnership-based products? 19:44:18

12 A. Help me understand what you mean by 19:44:21

13 "partnership-based products." 19:44:23

14 Q. Well, you were in the Partnership team. 19:44:25

15 Did it have a product? 19:44:27

16 A. The Partnership team doesn't have 19:44:29

17 products, no. 19:44:30

18 Q. And does it report revenue or income? 19:44:33

19 A. The Partnership -- the Platform 19:44:39

20 Partnerships team would typically assess the 19:44:41

21 utilization of the Facebook Developer Platform 19:44:49

22 product by Platform developers, and income from 19:44:52

23 Platform developers is one of the things that may 19:45:01

24 have been looked at in terms of understanding the 19:45:05

25 performance of the Platform products. 19:45:08

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1 Q. And what types of income did Facebook 19:45:11  
2 receive from Platform developers? 19:45:13

3 A. The types of income that Facebook would 19:45:18  
4 receive from Platform developers were, broadly: 19:45:21  
5 One, ad spend related to the Platform developer's 19:45:25  
6 products; and, two, in the case of games that used 19:45:35  
7 in-game currency where that game was rendered 19:45:41  
8 inside the Facebook Chrome on the web, Facebook 19:45:44  
9 would take a cut of the total payment volume inside 19:45:54  
10 of that game or app. 19:45:59

11 Q. And does Facebook consider the user data 19:46:07  
12 it collects and infers about users valuable? 19:46:09

13 A. Can you help me understand the -- the 19:46:15  
14 context, as in -- yeah. 19:46:17

15 Can you help me understand the context 19:46:20  
16 you're asking in? 19:46:21

17 Q. Sure. I'll ask more specifically. 19:46:22

18 Did Facebook do any financial analysis of 19:46:24  
19 the value of user data it collects and infers about 19:46:26  
20 users? 19:46:30

21 A. In -- let me understand. In any way, 19:46:39  
22 across any part of the company? Is that what 19:46:41  
23 you're asking? 19:46:43

24 Q. Yes. Yes. We can start big and go small. 19:46:44  
25 So, in any way. 19:46:47

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1 MR. BLUME: Objection to scope. 19:46:50

2 THE WITNESS: Yeah. It's hard for me to 19:46:52

3 answer that question at the full company level. 19:46:54

4 That's not what I've prepared to testify on. 19:46:57

5 On a personal level, there -- I can say 19:47:00

6 that there are products that the -- where the -- 19:47:04

7 where, like, the impact of the -- or the -- it's 19:47:18

8 hard for me to say. I can't give you a very crisp 19:47:22

9 and clear and accurate answer to that -- to that 19:47:26

10 question. It's not what I've testified on, and I'd 19:47:28

11 be giving you an inappropriate answer, I think. 19:47:31

12 BY MR. LOESER: 19:47:36

13 Q. If I wanted to have Facebook answer the 19:47:36

14 question whether it does financial analysis of the 19:47:38

15 value of user data that it collects, where would I 19:47:40

16 go in the company to get information about that? 19:47:44

17 Is that the finance department or -- or 19:47:47

18 where would that get reported? 19:47:50

19 MR. BLUME: Objection. Beyond the scope. 19:47:52

20 THE WITNESS: Yeah, I think different 19:47:57

21 teams assess the performance of their products in 19:47:59

22 different ways, and those products involve 19:48:02

23 different kinds of information. 19:48:05

24 So it's really hard to give you a specific 19:48:07

25 answer to that question. I couldn't give you a 19:48:09

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1 specific answer to that question. 19:48:11

2 BY MR. LOESER: 19:48:15

3 Q. Okay. And has Facebook done any analysis 19:48:15

4 of the value of the data it makes available to 19:48:17

5 third parties through the Facebook Social Graph? 19:48:20

6 MR. BLUME: Objection. Scope. 19:48:24

7 THE WITNESS: I've seen some analysis of 19:48:33

8 the impact of the Platform changes that were 19:48:34

9 proposed, and I've also seen and heard about 19:48:37

10 analysis done of the -- of the use of the Facebook 19:48:43

11 Developer Platform in terms of how people use it 19:48:46

12 and how that contributes revenue to Facebook. But 19:48:51

13 I've -- I don't recall seeing analysis specific to, 19:48:58

14 like, the user data itself. 19:49:01

15 BY MR. LOESER: 19:49:04

16 Q. Okay. Well, walk me through the two types 19:49:06

17 of analyses you just mentioned. 19:49:12

18 MR. BLUME: Objection to scope, but he can 19:49:18

19 in his personal capacity. 19:49:21

20 BY MR. LOESER: 19:49:23

21 Q. Well, let me clarify. 19:49:23

22 Your answer was: "I've seen some analysis 19:49:25

23 of the impact of the Platform changes that were 19:49:26

24 proposed." 19:49:29

25 So what's the analysis that you've seen of 19:49:30

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1 the impact of the Platform changes that were 19:49:32  
2 proposed? 19:49:34

3 A. So one of the documents I reviewed in 19:49:38  
4 preparation for the testimony today seems to -- 19:49:40  
5 seems to make an assessment of the various changes 19:49:45  
6 that were proposed to be launched and estimates the 19:49:48  
7 impact that might have on Facebook's revenues from 19:49:53  
8 developers. 19:49:57

9 So I recall reviewing a document of that 19:50:00  
10 form. 19:50:02

11 Q. And can you tell me more about that 19:50:03  
12 document; who created it and when it was created? 19:50:05

13 A. I don't know who created it or when it was 19:50:10  
14 created, but I do know it was -- my understanding 19:50:12  
15 is it was previously produced in -- in this 19:50:15  
16 litigation. So it should be available to you. 19:50:20

17 Q. Okay. We'll follow up with Mr. Blume and 19:50:28  
18 try and pin down that document. 19:50:33

19 And the second thing you said was an 19:50:35  
20 assessment of the various changes that were 19:50:39  
21 proposed and estimates of the impact they might 19:50:46  
22 have on Facebook's revenue from developers. 19:50:48

23 So what was that analysis? 19:50:51

24 A. So I think that's the thing I've just -- 19:50:52  
25 that's the thing I've just talked about. 19:50:54

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1 Q. Okay. Was there -- I thought you 19:50:56  
2 mentioned two different assessments that you saw. 19:50:58  
3 A. So that -- that document, I -- I saw in 19:51:03  
4 preparation for this case, this testimony. 19:51:06  
5 The other thing I recall mentioning is in 19:51:10  
6 my personal capacity, I recall there being analysis 19:51:16  
7 done of the -- the revenue that Facebook games 19:51:20  
8 provided to the Facebook company. 19:51:28  
9 But I don't recall a specific document on 19:51:32  
10 that, and I have not reviewed a document of that 19:51:36  
11 form in reference -- in preparation for this 19:51:38  
12 testimony. 19:51:41  
13 Q. And this may be covered by what you said 19:51:45  
14 before, but has Facebook ever analyzed the 19:51:47  
15 financial or other business benefits Facebook 19:51:49  
16 obtained by allowing third-party access to Facebook 19:51:52  
17 user friends data in particular? 19:51:56  
18 MR. BLUME: Objection to scope. 19:52:00  
19 THE WITNESS: I don't recall seeing any 19:52:03  
20 analysis that was specifically limited to friends 19:52:07  
21 data, no. 19:52:12  
22 BY MR. LOESER: 19:52:14  
23 Q. And what about analysis that was limited 19:52:16  
24 to deprecated permissions more broadly? 19:52:19  
25 A. I have not seen analysis related to 19:52:24

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1 deprecated permissions specifically, no. 19:52:27

2 Q. And has Facebook ever analyzed the 19:52:35

3 financial or other business impact of continuing to 19:52:37

4 allow certain apps and partners to have access to 19:52:40

5 friend-sharing after publicly deprecating 19:52:46

6 friend-sharing permissions? 19:52:49

7 A. So here we need to be specific when we 19:52:51

8 talk about friend-sharing permissions versus your 19:52:54

9 broader definition of friends data. 19:52:57

10 No, I -- I have not seen and am not aware 19:53:00

11 of any analysis that was done relating to 19:53:04

12 extensions allowing apps to continue to have 19:53:10

13 access -- some apps to continue to have access to 19:53:14

14 the friend permissions after they were more 19:53:17

15 publicly deprecated. 19:53:22

16 Q. And if the question is not friends 19:53:24

17 permissions specifically, but deprecated 19:53:27

18 permissions, does that change your answer? 19:53:30

19 A. I am not aware of any analysis that was 19:53:33

20 done to understand the impact of deprecated 19:53:36

21 permissions in particular. 19:53:40

22 As I testified previously, I -- sorry. 19:53:44

23 Q. Go ahead. I'm sorry. 19:53:46

24 A. As I testified previously, I have seen 19:53:50

25 analysis of the impact of the changes in general, 19:53:53

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1 but not specifically I recall seeing anything 19:53:59

2 related to just the deprecation of permissions. 19:54:03

3 Q. And did Facebook evaluate the loss of 19:54:08

4 revenue that could occur if a Facebook partner or 19:54:13

5 partners stopped doing business with Facebook 19:54:17

6 because Facebook deprecated permissions that the 19:54:20

7 partner used? 19:54:23

8 A. I don't recall seeing any analysis of 19:54:29

9 the -- on an app-specific basis or a 19:54:35

10 partner-specific basis. 19:54:40

11 It's possible that people that worked with 19:54:43

12 that partner might assert a potential loss of 19:54:45

13 revenue, but I don't recall any, you know, formal 19:54:52

14 analysis being done of -- of the financial impact 19:54:55

15 of deprecating something. 19:54:58

16 Q. And you say you don't recall, but I want 19:55:01

17 to make sure I understand what you're saying. 19:55:04

18 Did Facebook do that analysis, do you 19:55:06

19 know? 19:55:10

20 A. I do not know, and I have not seen any 19:55:11

21 evidence in preparation for this that they did. 19:55:13

22 Q. And if you were to find -- to search for 19:55:16

23 the answer to that question, who would you ask? 19:55:19

24 A. I would ask Ime, probably, who was 19:55:26

25 involved in -- who led the Partnerships team around 19:55:35

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1       this time -- sorry, let me be clearer about around       19:55:39

2       this time.       19:55:42

3               In the period 2013 to 2018, I believe, he       19:55:45

4       may be aware of whether or not such analysis was       19:55:51

5       done.       19:55:53

6               Q.   So -- sorry, I have to reach for a       19:56:02

7       document.       19:56:05

8               Going back to the notice, on Topic 6, you       19:56:06

9       have -- the last part of that notice calls for       19:56:08

10       testimony about the revenue impact and net profits       19:56:15

11       for Facebook relating to friend-sharing throughout       19:56:19

12       the class period.   Correct?       19:56:21

13               A.   I'll wait to see till it comes on the       19:56:26

14       screen.       19:56:29

15               Q.   Sure.   And so I am going to ask you a       19:56:30

16       question -- yeah, I'm going to ask you a question       19:56:36

17       based on the notice, and you can tell me what       19:56:38

18       Facebook's answer is.       19:56:40

19               But what is the revenue impact and net       19:56:41

20       profits for Facebook related to friend-sharing       19:56:44

21       before Facebook publicly deprecated friend-sharing       19:56:46

22       APIs?       19:56:49

23               A.   My understanding is that Facebook did       19:56:53

24       not -- has not done analysis as to the revenue       19:56:56

25       impact and net profits related to friend-sharing.       19:57:01

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1 Q. And what is the revenue impact and net 19:57:07  
2 profits for Facebook related to friend-sharing 19:57:09  
3 after publicly deprecating friend-sharing APIs but 19:57:16  
4 continuing to allow friend-sharing for certain apps 19:57:19  
5 and partners? 19:57:21

6 A. In preparation for this -- this testimony, 19:57:24  
7 I attempted to see whether or not any such analysis 19:57:28  
8 has been done. 19:57:33

9 My understanding is that no analysis was 19:57:34  
10 done. I am not aware of any analysis having been 19:57:36  
11 done about the revenue impact to net profits 19:57:40  
12 relating to friend-sharing before or after the 19:57:44  
13 deprecation period. 19:57:47

14 Q. And who -- what did you do to educate 19:57:48  
15 yourself on that question? 19:57:52

16 A. I spoke to Ime, and I reviewed the 19:57:56  
17 document -- several documents provided to me in 19:58:03  
18 this case. 19:58:05

19 Q. So I'm about to move on to Topic 7, and 19:58:27  
20 we've been going for about an hour, so it's 19:58:30  
21 probably a good time to take a break. We also have 19:58:33  
22 your notes, and I just need to quickly look at them 19:58:36  
23 and see if I have any other questions about Topic 6 19:58:38  
24 regarding your notes. 19:58:39

25 If you don't want to take a break, I can 19:58:42

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1 plow ahead, but it's been an hour, and if you want 19:58:42  
2 to take a break, that's fine too. 19:58:42  
3 A. Yeah, let's just take five minutes. That 19:58:44  
4 would be good. I'll just stretch a bit; make sure 19:58:48  
5 I'm fresh. 19:58:51  
6 THE VIDEO OPERATOR: We're off the record 19:58:52  
7 at 7:58 P.M. 19:58:53  
8 (Recess from 7:58 P.M. to 8:12 P.M.) 19:58:55  
9 THE VIDEO OPERATOR: We're back on the 20:12:47  
10 record. It's 8:12 P.M. 20:12:48  
11 MR. LOESER: Mr. Cross, we're going to 20:12:56  
12 mark as an exhibit the notes that -- that you 20:12:57  
13 provided to your counsel who then provided them to 20:13:01  
14 us. 20:13:03  
15 And if we have time today, we might come 20:13:14  
16 back and ask a few questions about them, but for 20:13:17  
17 now, I just wanted to mark them as an exhibit. So 20:13:19  
18 we can just put them up, introduce them, and move 20:13:22  
19 on. 20:13:25  
20 (Deposition Exhibit 335 was marked for 20:13:25  
21 identification.) 20:13:29  
22 BY MR. LOESER: 20:13:30  
23 Q. I do have, actually, one -- we don't need 20:13:31  
24 to put the exhibit back up, but I had noticed in 20:13:33  
25 your notes when I asked you earlier who had 20:13:35

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1 developed friend-sharing, you couldn't recall, but 20:13:38  
2 your notes indicate it was Luke Shepherd, 20:13:40  
3 Ari Steinberg, and Alex Himmel. Is that correct? 20:13:43  
4 A. Those are three names of people that I 20:13:49  
5 believe to have been involved in the early 20:13:51  
6 development of the Facebook Developer Platform 20:13:53  
7 which included sharing friends data as part of the 20:13:55  
8 model. 20:14:02  
9 Q. And when you say "early development," 20:14:02  
10 what's the time period that you're referring to? 20:14:03  
11 A. My understanding is that Ari Steinberg was 20:14:11  
12 involved in the 2007/2008 time frame, although I 20:14:14  
13 don't have the specifics. 20:14:19  
14 Luke Shepherd was involved in the Platform 20:14:21  
15 when I joined in September 2010. I'm not sure when 20:14:24  
16 his tenure in that space began or ended. 20:14:29  
17 And Alex Himmel is another person that I 20:14:36  
18 know was involved in the Facebook Developer 20:14:39  
19 Platform. 20:14:40  
20 Whether or not these folks were 20:14:42  
21 specifically involved in the original design of the 20:14:44  
22 platform, which included friend-sharing, it's hard 20:14:49  
23 for me to know specifically. 20:14:53  
24 Q. Okay. Thank you. 20:14:57  
25 Let's go back to the notice. We're going 20:14:59

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1 to move on to Topic 7. 20:15:00

2 It's a little longer, so I won't read the 20:15:08

3 whole thing into the record, but I gather you have 20:15:10

4 read all of Topic 7 and you are prepared to testify 20:15:12

5 about this topic. 20:15:19

6 And you've described what you did to 20:15:34

7 prepare for Topic 6. 20:15:36

8 When you prepared for Topic 6, were you 20:15:38

9 also at the same time preparing for Topic 7? 20:15:40

10 A. That's correct. I was preparing for the 20:15:44

11 two in parallel. 20:15:45

12 Q. And is there anybody that you talked to at 20:15:49

13 Facebook to get information about Topic 7 that is 20:15:51

14 different than the folks that you talked to about 20:15:54

15 Topic 6? 20:15:57

16 A. No. The set of people I talked to, I 20:15:59

17 talked to about all of the matters I was preparing 20:16:03

18 to testify on. 20:16:05

19 Q. And is there any component of Topic 7 that 20:16:14

20 you only have knowledge of based upon the 20:16:17

21 preparations that you did for this deposition? 20:16:19

22 A. Yes. I think 7-a, each whitelisted 20:16:24

23 entity; b, only -- so b, I have some personal 20:16:33

24 experience there; c, I also have some personal 20:16:46

25 experience. 20:16:56

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1 D -- could you scroll d onto the screen, 20:17:02

2 please? There you go. That was easy. 20:17:05

3 So I think I have some personal experience 20:17:08

4 in all, but with 7-a, primarily I'm relying on the 20:17:11

5 forensic work that was done after my involvement in 20:17:19

6 the Facebook Developer Platform to answer those 20:17:25

7 questions. 20:17:29

8 Q. And based on your preparation with regard 20:17:31

9 to Topic 7, do you believe you are reasonably 20:17:33

10 educated to testify on these matters? 20:17:37

11 A. I believe I am reasonably educated to 20:17:39

12 testify. I've done as much as I could to prepare. 20:17:41

13 Q. And last night, your counsel informed us 20:17:53

14 that you are not prepared to testify about call 20:17:54

15 logs, APIs, or permissions granted to any 20:17:57

16 particular entity. 20:18:00

17 And is that -- is that your understanding? 20:18:03

18 A. Yeah. We -- I want to make sure that I -- 20:18:12

19 in answering those questions, I want to make sure I 20:18:15

20 have done as much preparation as possible, and I 20:18:17

21 think a couple more -- a bit more time to make sure 20:18:25

22 I can speak to those topics would be valuable. 20:18:28

23 Q. Okay. And over the course of your 20:18:33

24 employment at Facebook, did you develop any 20:18:34

25 personal knowledge of call logs, APIs, or 20:18:36

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1 permissions granted to any particular entity? 20:18:40

2 A. I developed -- I was in -- I had access to 20:18:44

3 and would have used some of the tools that would 20:18:48

4 help analyze call logs and Platform API usage and, 20:18:56

5 in the course of doing that, would have seen 20:19:03

6 information to do with particular apps. 20:19:05

7 But that's a long time ago, and I wouldn't 20:19:10

8 remember the specifics, and I don't know what in 20:19:13

9 general Facebook would have access to today, many 20:19:15

10 years after -- many years after my time directly 20:19:18

11 involved in this stuff. 20:19:23

12 Q. Okay. Thank you. 20:19:24

13 Mr. Cross, please explain what it means to 20:19:27

14 "whitelist" an app or a partner in the context of 20:19:29

15 access to APIs. 20:19:33

16 A. The -- can you be specific? 20:19:47

17 Which APIs are we referring to here? 20:19:49

18 Q. Just generally, back to making sure we 20:19:52

19 have the terminology down and I'm using the right 20:19:54

20 words to talk about what we're discussing, there's, 20:19:57

21 obviously, a lot of documents that talk about, 20:19:59

22 refer to, and use the term "whitelist," and I 20:20:01

23 gather that's a term that can be applied in a 20:20:05

24 variety of contexts. 20:20:07

25 But when it's connected to granting access 20:20:08

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1 to particular APIs or -- I'm continually getting 20:20:11  
2 this wrong -- permissions, does it have a 20:20:17  
3 particular meaning? 20:20:20

4 A. In the context -- we referred to in the 20:20:21  
5 context of the Facebook Developer Platform again? 20:20:23

6 Q. Yeah. Yes. 20:20:26

7 A. So in that context, I understand 20:20:32  
8 "whitelisting" to refer to where a given 20:20:33  
9 application is added to a list of applications 20:20:38  
10 that -- whose behavior or whose -- the behavior of 20:20:45  
11 the API, and the Facebook Developer Platform is 20:20:50  
12 modified in some way for those applications. 20:20:53

13 Q. And consistent with that definition, when 20:21:05  
14 did Facebook first start whitelisting any app or 20:21:07  
15 partner? 20:21:10

16 A. So the -- given that the concept of 20:21:14  
17 whitelisting in general applies to making -- you 20:21:16  
18 know, modifying the changes to the -- modifying the 20:21:21  
19 behavior of the Facebook Developer Platform, then 20:21:24  
20 whitelisting in some form has been used 20:21:27  
21 consistently throughout the development of the 20:21:31  
22 Facebook Developer Platform in some way. 20:21:35

23 Q. And, again, I want to make sure I have the 20:21:46  
24 technology correct, but what does it mean to 20:21:48  
25 whitelist friend-sharing APIs for an app? 20:21:52

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1                   Or let me put it this way: What does it                   20:21:55  
2                   mean to whitelist an app's ability to collect                   20:21:58  
3                   friend-sharing data?                   20:22:00  
4                   A. So this would refer to what we mean by                   20:22:06  
5                   "friend-sharing data." In this context, one way                   20:22:11  
6                   that that could have manifested is where an app has                   20:22:20  
7                   access to APIs and permissions which were not                   20:22:28  
8                   generally available to other Facebook developers                   20:22:33  
9                   and applications at the time.                   20:22:38  
10                  Q. Okay. And I've seen in Facebook's                   20:22:42  
11                  documents "whitelisting" used in reference to apps,                   20:22:45  
12                  but I've also seen it used in reference to                   20:22:50  
13                  partners.                   20:22:52  
14                  Is there a different definition that                   20:22:53  
15                  Facebook uses when thinking of whitelisting                   20:22:55  
16                  partners in the context of the Platform?                   20:22:59  
17                  A. So back to my original definition of                   20:23:04  
18                  "application" being a very specific entity in the                   20:23:06  
19                  Facebook Developer Platform ecosystem, a partner                   20:23:08  
20                  would refer to an entity, a -- for example, a                   20:23:14  
21                  company. And that company may have several, one or                   20:23:17  
22                  more, Facebook applications, and those applications                   20:23:24  
23                  may or may not have been whitelisted for                   20:23:32  
24                  alternative API behavior.                   20:23:35  
25                  So in that context, you know, when a -- a                   20:23:38

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1 partner is -- if you see the phrase "partner has 20:23:41  
2 been whitelisted," what specifically happens in 20:23:45  
3 the -- in the -- in the code base is that the 20:23:48  
4 applications owned -- the Facebook applications 20:23:54  
5 owned and maintained by that partner, the app IDs 20:23:59  
6 have been granted some modification to the standard 20:24:05  
7 API behavior. 20:24:09

8 Q. And through those modifications, those 20:24:12  
9 partners, vis-à-vis their apps or, if it's a 20:24:15  
10 developer, the developer vis-à-vis its app would 20:24:19  
11 gain access to friend data that would not otherwise 20:24:23  
12 have been available to that app or partner. 20:24:28

13 Is that a fair description? 20:24:33

14 A. Well, it's a wide range of whitelists and 20:24:35  
15 capabilities that were in the system. Many of 20:24:39  
16 them, in fact, my understanding is the vast 20:24:44  
17 majority of them were not related to friend data at 20:24:47  
18 all. 20:24:49

19 Q. Okay. And, in fact, there's plenty of 20:24:54  
20 discussion in Facebook documents about the other 20:24:56  
21 permissions that were deprecated with Version 2 20:24:58  
22 that also were whitelisted for certain apps and 20:25:03  
23 partners. Right? 20:25:07

24 A. There's -- when you say "whitelisted," 20:25:09  
25 what time period are you referring to here? 20:25:13

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1                   It's very specific, given that                   20:25:15  
2           whitelisting as a concept is something that's very           20:25:17  
3           common in the industry and will have been used in           20:25:21  
4           this context for many years.                   20:25:24

5           Q.   Sure.   Is the use of whitelisting                   20:25:26  
6           vis-à-vis the Facebook Platform, did that mean           20:25:30  
7           something different at different times in                   20:25:35  
8           Facebook's lifespan?                   20:25:38

9           A.   Well, the general definition of                   20:25:42  
10          whitelisting in the context of the Facebook           20:25:44  
11          Platform is that by being on a whitelist, you get           20:25:46  
12          some kind of different behavior -- the Platform           20:25:50  
13          behaves in some kind of different way to people not           20:25:54  
14          on the whitelist.                   20:25:57

15                   Exactly what that behavior is depends on           20:25:59  
16                   specifically what the capability is.                   20:26:02

17                   And so, again, over time, the high -- at           20:26:06  
18                   the conceptual level, the concept of whitelisting           20:26:11  
19                   hasn't changed, but exactly which whitelists           20:26:15  
20                   existed, for what purpose they were used, and who           20:26:18  
21                   had access to them at any given time will have           20:26:21  
22                   changed considerably over time.                   20:26:23

23           Q.   Okay.   And so we've talked about                   20:26:26  
24           whitelisting.                   20:26:28

25                   Let's talk about private APIs for a                   20:26:29

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1 minute. 20:26:32

2 Does Facebook conceive of private APIs as 20:26:32

3 something different than whitelisting? 20:26:36

4 A. I think we discussed the definition of 20:26:42

5 private APIs earlier in the -- in the testimony. 20:26:44

6 So that would be, in my -- in my determination, 20:26:46

7 APIs or behaviors which were not available -- in 20:26:55

8 this case, "private APIs" would typically refer to 20:27:01

9 APIs or permissions that were not generally 20:27:04

10 available. 20:27:06

11 Whitelisting is the concept of who has 20:27:07

12 access to the private APIs, but there is also 20:27:10

13 whitelisting which is nothing to do with private 20:27:15

14 APIs or permissions in any way. 20:27:19

15 Q. And your answer probably helps to explain 20:27:22

16 why there is some confusion in the documents about 20:27:25

17 this because these terms do seem to get -- they 20:27:27

18 seem overlapping but also different; so I want to 20:27:30

19 make sure I understand. 20:27:33

20 The only way an app that is created by a 20:27:34

21 developer that is not a partner with Facebook can 20:27:40

22 get access to publicly deprecated APIs is through a 20:27:43

23 whitelist. Right? 20:27:47

24 A. That would depend on the precise time 20:27:50

25 we're talking about. It would also depend on when 20:27:53

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1 the application was created. 20:27:56

2 Q. Okay. Well, let's talk about 2014 to the 20:27:59

3 present. 20:28:02

4 Is there a way other than a whitelist for 20:28:04

5 a developer or an app that is not considered a 20:28:07

6 partner of Facebook's to get access to publicly 20:28:10

7 deprecated permissions? 20:28:13

8 A. Via permission being publicly 20:28:21

9 deprecated -- let's take an example, I think, is 20:28:23

10 the easiest way to answer that question. 20:28:26

11 So the -- where permissions which were 20:28:28

12 publicly available to API Version 1 which were not 20:28:33

13 publicly available in API Version 2, for 20:28:37

14 applications that originally could call API 20:28:41

15 Version 1 that later could only call API Version 2, 20:28:45

16 when that public deprecation was complete, the only 20:28:52

17 way to access those publicly deprecated permissions 20:28:56

18 would have been to be on a whitelist; one or more 20:29:01

19 whitelists. 20:29:06

20 Q. And so developers -- well, let's start 20:29:09

21 with apps. 20:29:12

22 Apps could be on that whitelist, right? 20:29:13

23 A. In the context of the Facebook Developer 20:29:17

24 Platform and specifically referring to app-based 20:29:18

25 whitelisting -- there are other forms of 20:29:21

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1 whitelisting available -- then, yes, the 20:29:23

2 application ID would have been on a whitelist. 20:29:28

3 Q. And partners could be on a whitelist too. 20:29:33

4 But in order for that to be functional, they had to 20:29:39

5 have a private API? 20:29:41

6 A. Sorry. I think we're getting our concepts 20:29:44

7 mixed up here, and it's getting hard to answer -- 20:29:47

8 answer the questions. 20:29:50

9 So how do you want to proceed? I feel 20:29:52

10 like we may need to reclarify some of these 20:29:56

11 definitions because you're mixing them up in your 20:29:59

12 questions. 20:30:02

13 Q. All I'm trying to do is figure out what 20:30:03

14 the distinction is between a whitelist and a 20:30:05

15 private API, and specifically in the context of 20:30:08

16 giving a third-party access to deprecated 20:30:10

17 permissions after 2014. 20:30:12

18 So is there a difference between, in that 20:30:14

19 context, a whitelist and a private API? 20:30:16

20 A. Yes. As I previously testified, a 20:30:20

21 whitelist is a -- a mechanism by which -- in the 20:30:22

22 context of the Facebook Platform, an app ID is 20:30:26

23 specified in some way as having alternative -- you 20:30:30

24 know, having a different API behavior than happens 20:30:33

25 that are not on the whit list. 20:30:37

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1 Private APIs are -- some of the things 20:30:39  
2 that you could be whitelisted for, but there are 20:30:43  
3 other things that you could also be whitelisted 20:30:45  
4 for. For example, rate limit behavior. Different 20:30:48  
5 rate limit behavior. Right? 20:30:51

6 So whitelisting is the concept by which an 20:30:53  
7 application ID, in the -- sorry. 20:30:56

8 Whitelisting is the concept by which an 20:30:59  
9 application ID in the context of the Facebook 20:31:02  
10 Platform is offered some deeper, nonstandard, or 20:31:03  
11 nonpublic behavior, different behavior. 20:31:09

12 And then there are some whitelists, 20:31:11  
13 specifically called "capabilities," that would 20:31:16  
14 determine exactly what behavior those applications 20:31:18  
15 had that was different to the standard. 20:31:23

16 Q. Okay. And are private APIs established 20:31:28  
17 through a contract between Facebook and a Facebook 20:31:30  
18 partner? 20:31:32

19 A. Not always. Not always. There -- again, 20:31:38  
20 there are a number of private APIs and a number of 20:31:42  
21 different private behaviors -- different behaviors. 20:31:45  
22 Some of those would be governed -- granted under a 20:31:49  
23 contract; others would not. 20:31:53

24 For example, rate-limiting; you wouldn't 20:31:56  
25 necessarily expect a developer to agree to a 20:31:58

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1 contract to be on the rate-limit whitelist. 20:32:01

2 Q. What is a "rate-limit whitelist"? 20:32:06

3 A. So "rate limits" refers to the number of 20:32:09

4 API calls that an application can make within a 20:32:14

5 given time period in a number of different, 20:32:17

6 complicated ways. 20:32:20

7 There's the standard set of how the rate 20:32:22

8 limits work. 20:32:26

9 And then, for some applications that 20:32:27

10 needed to operate differently, then there was a 20:32:32

11 whitelist that allowed those rate limits to be 20:32:35

12 changed for certain applications. 20:32:39

13 And so, again, that's an example of a 20:32:43

14 whitelist, which is a concept implemented by a 20:32:45

15 capability, which is a specific thing that modified 20:32:49

16 the behavior of the API for the people on the 20:32:53

17 whitelist that was not in any way related to 20:32:56

18 friends data. 20:32:59

19 Q. And so one of the ways private APIs were 20:33:01

20 used at Facebook was to enable certain Facebook 20:33:05

21 partners to continue to have access to friends 20:33:08

22 data. Right? 20:33:11

23 A. Can you be specific as to what time period 20:33:14

24 you're talking about here? Because this -- the 20:33:16

25 time periods here matter greatly in the specificity 20:33:18

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1 of my answers. 20:33:22

2 Q. So when did private APIs first appear at 20:33:24

3 Facebook? 20:33:29

4 A. The -- the concept of private API, I -- 20:33:33

5 you're -- I'm referring to any API or permission 20:33:37

6 that was not generally available. 20:33:41

7 When the Facebook Developer Platform was 20:33:47

8 launched, it was launched with launch partners. 20:33:49

9 Actually, a better example is, let's say, 20:33:52

10 Facebook Connect in 2008. There were a number 20:33:55

11 of -- Facebook Connect as a product was -- before 20:33:59

12 it was launched -- not publicly available; and yet 20:34:05

13 on launch day, there were a number of partners that 20:34:08

14 had built integrations with it. 20:34:11

15 Before the launch, you could consider 20:34:14

16 Facebook Connect a private API; and, therefore, 20:34:16

17 access to it was governed by a whitelist. 20:34:20

18 After the launch, Facebook Connect was 20:34:23

19 generally available to all developers, and so you 20:34:25

20 didn't need to be on a whitelist to access it. 20:34:28

21 So whitelists are an industry-standard way 20:34:31

22 of modifying API behavior in certain circumstances, 20:34:34

23 launching new products, and offering them to your 20:34:39

24 launch partners in advance of them being generally 20:34:43

25 available. 20:34:45

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1 And, in the context of the Facebook 20:34:48  
2 Platform in this litigation, it's also possible to 20:34:50  
3 use a whitelist to grant some developers and 20:34:57  
4 partners access to permissions that had been 20:35:01  
5 removed from other developers. 20:35:04  
6 Q. Okay. And when was the first time that 20:35:09  
7 partners obtained access to publicly deprecated 20:35:11  
8 friend permissions via a private API? 20:35:18  
9 (Rose Ring joined the deposition.) 20:35:21  
10 THE WITNESS: The -- strange noise. 20:35:25  
11 So, specifically, when it comes to friend 20:35:28  
12 permissions, as a set of things that were 20:35:32  
13 deprecated, then up until beginning April 30, 2015, 20:35:35  
14 if your app had been created before April 30, 2014, 20:35:44  
15 then you would have access to those permissions. 20:35:50  
16 When the deprecation of API 1 -- the 20:35:55  
17 public deprecation of API V1 began on April 30, 20:36:00  
18 2015, that's when the -- that's the beginning where 20:36:03  
19 an application that would otherwise have lost 20:36:07  
20 access to their friend permissions could have 20:36:09  
21 continued to access them if they were on a 20:36:13  
22 whitelist. 20:36:18  
23 BY MR. LOESER: 20:36:19  
24 Q. Through private APIs. 20:36:19  
25 A. Well, via being on a whitelist. 20:36:22

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1 In this case, we're specifically referring 20:36:25  
2 to friend permissions, which is, I think, what your 20:36:27  
3 original question was. 20:36:30

4 Q. And what is the "Capability" tool at 20:36:33  
5 Facebook? 20:36:36

6 A. The Capability tool is an internal tool 20:36:39  
7 used at Facebook to manage [REDACTED] 20:36:42

8 [REDACTED] 20:36:47

9 (Discussion off the record.) 20:36:50

10 MS. RING: I am very sorry. This is 20:37:12  
11 Rose Ring, and I am counsel for Meta. I'm sorry 20:37:12  
12 for not announcing myself. 20:37:16

13 BY MR. LOESER: 20:37:26

14 Q. And, Mr. Cross, you were starting to 20:37:28  
15 describe the Capability tool, so keep going. 20:37:31

16 A. So the Capability tool is an internal tool 20:37:35  
17 at Facebook Meta that's used to manage which 20:37:39  
18 [REDACTED] a 20:37:44  
19 "capability" being a -- a mechanism for changing 20:37:51  
20 the -- modifying the behavior of the Facebook 20:37:58  
21 Developer Platform. 20:38:01

22 So with an application having access to a 20:38:02  
23 capability, you would say it had been 20:38:05  
24 "whitelisted." 20:38:07

25 Q. And for what period of time has the 20:38:09

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1 Capability tool been in existence? 20:38:13

2 A. My understanding is it was built in around 20:38:16

3 2011 and replaced a previous tool that did a 20:38:20

4 similar job. 20:38:30

5 But the development, as I understand it, 20:38:31

6 began in around 2011. 20:38:33

7 Q. And do you know what the previous tool was 20:38:36

8 called? 20:38:38

9 A. There was a previous tool called 20:38:40

10 "Pearly Gates." 20:38:42

11 Q. Okay. It seems like it had bold 20:38:47

12 ambitions. 20:38:49

13 So -- and Pearly Gates was self-deprecated 20:38:53

14 and replaced by the capability tool? 20:39:01

15 A. My understanding is that the Capabilities 20:39:04

16 tool replaced Pearly Gates as a way of managing 20:39:05

17 [REDACTED] 20:39:12

18 [REDACTED] 20:39:17

19 Q. And do you know why it was called 20:39:19

20 "Pearly Gates"? 20:39:21

21 A. I do not. 20:39:23

22 Q. And what are "Gatekeepers"? 20:39:26

23 A. So a Gatekeeper is -- or Gatekeepers. 20:39:30

24 Gatekeeper is a tool at Meta which is widely used 20:39:34

25 to [REDACTED] within the Facebook apps 20:39:38

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1 and services, including the Facebook app itself and 20:39:47  
2 a number of other services inside the company. 20:39:56  
3 "Gatekeepers" refers to the [REDACTED] 20:39:59  
4 that exist in code to determine [REDACTED] 20:40:09  
5 [REDACTED] 20:40:14  
6 I think the best way to explain it is with 20:40:16  
7 an example. 20:40:18  
8 Typically, when Facebook develops a new 20:40:20  
9 feature, the engineers will -- will gate that 20:40:22  
10 feature behind a Gatekeeper. 20:40:29  
11 So let's imagine Facebook Dating. So the 20:40:31  
12 team working on Facebook Dating would be working on 20:40:36  
13 that feature. That feature would be gated by a 20:40:39  
14 gatekeeper or multiple gatekeepers, and then the 20:40:44  
15 Gatekeeper tool would be used to [REDACTED] 20:40:48  
16 [REDACTED] 20:40:50  
17 And so Gatekeeper is a mechanism by which 20:40:54  
18 Meta typically [REDACTED] 20:41:00  
19 [REDACTED] across many aspects of our business. 20:41:04  
20 Q. So the Capabilities tool is more or less a 20:41:11  
21 tracking device, and the Gatekeeper is more or less 20:41:13  
22 a functional system. 20:41:17  
23 Is that a fair description? 20:41:19  
24 A. I wouldn't characterize them that way. 20:41:20  
25 They both, in some ways, do a similar job. 20:41:22

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1           The Gatekeeper tool is widely used at Meta           20:41:26  
2           to manage [REDACTED] to           20:41:32  
3           things.           20:41:37

4           The Capabilities tool is specifically just           20:41:38  
5           used for the Facebook Developer Platform and how to           20:41:41  
6           manage [REDACTED]           20:41:47  
7           [REDACTED].           20:41:51

8           Q. Okay. So if you wanted to identify every           20:41:52  
9           single app that had been whitelisted and, because           20:41:54  
10          of that, received deprecated permissions, would all           20:41:59  
11          of your information be in the Capability tool, or           20:42:03  
12          would you also need to look at the Gatekeeper tool?           20:42:06

13          A. My understanding is that most of the           20:42:11  
14          whitelists -- most of the way in which publicly           20:42:16  
15          deprecated permissions were made available to           20:42:23  
16          applications was via the Capabilities tool.           20:42:28

17          There was, as I understand it, some           20:42:32  
18          whitelists managed by Gatekeeper, and an effort was           20:42:36  
19          undertaken to migrate that management from           20:42:40  
20          Gatekeeper to the Capabilities tool for           20:42:42  
21          consistency.           20:42:45

22          Q. And when was that done?           20:42:46

23          A. I don't have the information as to when           20:42:50  
24          that was done.           20:42:52

25          Q. So, today, is the Capability tool the more           20:42:54

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1 complete set of information on whitelisted 20:42:58

2 entities? 20:43:01

3 A. When it comes to Facebook Developer 20:43:02

4 Platform and app IDs being whitelisted, my 20:43:04

5 understanding is that the Capabilities tool is the 20:43:09

6 primary and most complete system that tracks which 20:43:11

7 [REDACTED] 20:43:17

8 Q. And what is "Sitevars"? 20:43:20

9 A. Sitevars is another mechanism that is used 20:43:25

10 at Meta to [REDACTED] -- of 20:43:30

11 various products. It has a different set of 20:43:36

12 features the Gatekeeper and the Capabilities tool 20:43:39

13 do not have. 20:43:45

14 Q. And are there entities that have access to 20:43:46

15 publicly deprecated permissions tracked by Sitevars 20:43:48

16 that are not tracked by the Capabilities tool? 20:43:52

17 A. My understanding, but -- from talking to 20:43:56

18 the engineers involved in this is that no, Sitevars 20:43:59

19 would not be a way of determining whether or not an 20:44:06

20 application had access to publicly deprecated 20:44:11

21 permissions. 20:44:14

22 MR. LOESER: Okay. If we could have 20:44:18

23 Tab 9. 20:44:26

24 (Deposition Exhibit 336 was marked for 20:44:26

25 identification.) 20:44:26

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1 MR. LOESER: I'm going to mark the next 20:44:41

2 exhibit. This is Exhibit 336. The Bates number on 20:44:42

3 this is FB-CA-MDL-00200051. 20:44:53

4 And you're looking at, Mr. Cross, an email 20:44:59

5 from you to Zhen Fang, cc to Jackie Chang and 20:45:02

6 Christopher Blizzard, October 31, 2013, "Subject: 20:45:09

7 Docs for Private Platform/Capabilities." 20:45:14

8 Do you see that? 20:45:17

9 A. I do. 20:45:18

10 Q. And do you recall writing this email? 20:45:20

11 A. I do not recall writing it, but I have 20:45:24

12 seen this document as part of my preparation for my 20:45:28

13 testimony today. 20:45:31

14 Q. Okay. And you write: 20:45:32

15 "Hey Zhen, As we're deep in looking at 20:45:34

16 Capabilities, it's clear:" 20:45:38

17 Can you read the Number 1? 20:45:39

18 A. (Reading): 20:45:41

19 "Number 1, we have no idea what most of 20:45:42

20 them are - the documentation is scattered all 20:45:44

21 over, if there at all." 20:45:47

22 Q. And do you recall -- or explain for me if 20:45:53

23 Facebook had a tough time figuring out what all of 20:45:56

24 the -- what all was supposed to be included on the 20:46:00

25 Capabilities tool or who all had been whitelisted 20:46:03

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1 at this time. 20:46:11

2 MR. BLUME: Objection. Compound. 20:46:12

3 THE WITNESS: Yeah. Could you separate 20:46:13

4 the question into two parts because I think the 20:46:14

5 answer -- the answer may be different depending on 20:46:17

6 which part I'm answering. 20:46:20

7 BY MR. LOESER: 20:46:22

8 Q. Sure. It looked like, based upon your 20:46:22

9 email here, that tracking the capabilities that 20:46:24

10 apps had was at this time disorganized and 20:46:28

11 difficult. 20:46:31

12 Is that fair? 20:46:34

13 A. What I -- what's being referred to here is 20:46:35

14 to do with the capabilities themselves and what 20:46:39

15 their behavior was; what each individual capability 20:46:45

16 did or could do. 20:46:50

17 So that's what this is referring to. 20:46:55

18 Q. And so you're proposing here creating a 20:46:59

19 tool that would allow Facebook to better understand 20:47:02

20 and organize the capabilities that the different 20:47:04

21 apps have. Right? 20:47:08

22 A. No. What I'm referring to here is the -- 20:47:12

23 the idea, or the request, to be able to gate 20:47:16

24 documents on the Facebook Developer website based 20:47:21

25 on whether or not the viewer of the website had -- 20:47:26

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1 was a developer of an app that had a specific 20:47:32  
2 capability. 20:47:34

3 Q. So what problem were you trying to solve 20:47:36  
4 here? 20:47:38

5 Or let me ask it another way. 20:47:41

6 What problem was Facebook trying to solve 20:47:43  
7 here? 20:47:45

8 A. What Facebook is trying to solve here is a 20:47:46  
9 way to automatically control whether or not a given 20:47:49  
10 developer user -- so an individual person -- had 20:47:57  
11 the ability to see a document on the Facebook 20:48:01  
12 Developer website that was only visible to them if 20:48:04  
13 they were the developer of an application that 20:48:08  
14 had -- was granted a particular capability. 20:48:11

15 MR. LOESER: Okay. We can go to the next 20:48:30  
16 exhibit, Tab 10. 20:48:32

17 (Deposition Exhibit 337 was marked for 20:48:36  
18 identification.) 20:48:40

19 BY MR. LOESER: 20:48:53

20 Q. So as we're waiting for the document, 20:48:53  
21 Mr. Cross, as we've discussed already today, with 20:48:55  
22 the implementation of Graph API Version 2, Facebook 20:48:58  
23 had decided to deprecate a number of permissions, 20:49:00  
24 right, and had come up with a list of the 20:49:06  
25 permissions that would be deprecated. 20:49:09

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1 Is that an accurate description? 20:49:11

2 A. As part of API Version 2 launch, Version 2 20:49:14

3 contained -- there were a number of permissions 20:49:18

4 that were not available to API Version 2 in general 20:49:20

5 that were available in API Version 1. 20:49:24

6 Q. And so if you look at Exhibit 337, which 20:49:30

7 is a -- which is a document that is captioned 20:49:32

8 "Changes made to V2 at F8\*\*User Trust\*\*." 20:49:40

9 Do you see that? 20:49:49

10 A. I do see that. 20:49:50

11 Q. And this appears to be a document that was 20:49:50

12 describing the changes that would be made to the 20:49:52

13 platform in the transition from Version 1 to 20:49:58

14 Version 2. Right? 20:50:01

15 A. It seems to talk about those changes, but 20:50:04

16 it's not clear to me when this document was 20:50:06

17 authored or the audience of the document. 20:50:09

18 Q. Okay. At the very top of the document, 20:50:14

19 you can see that it was authored -- it's a little 20:50:15

20 faint, but it's June 5, 2014. 20:50:18

21 Do you see that? 20:50:22

22 A. I see that there, but it's not clear to me 20:50:24

23 that this is when the document was authored. That 20:50:26

24 may have been when the document was captured. It's 20:50:31

25 hard to read from this exactly what this -- where 20:50:35

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1       this document was posted. It seems to contain -- 20:50:40

2           Q. Okay. And I'll just -- 20:50:48

3           A. Yeah, it -- I'm not clear -- I'm not clear 20:50:50

4       when this document was authored or whether or not 20:50:53

5       that date -- what that date at the top right 20:50:55

6       pertains to. 20:50:58

7           MR. LOESER: Okay. And just for the 20:50:59

8       record, I'll note that the metadata of this 20:51:00

9       document indicates that it was created June 5, 20:51:03

10      2014. The author is Gillian Dunne, and the 20:51:06

11      custodian for the document was Bill Fusz. 20:51:12

12           But I'm just noting that for the record, 20:51:15

13      and perhaps it provides you some context. 20:51:18

14           But all I want to do with this document is 20:51:20

15      look at -- if you go down to the bottom of the 20:51:22

16      first page, there is a statement: "Permissions no 20:51:24

17      longer available in V2.0." 20:51:29

18           Q. And do you see there's a list that begins 20:51:33

19      there and goes onto the next page? 20:51:35

20           A. I do see that. 20:51:37

21           Q. And included in that there's the category 20:51:40

22      that says: "All friends\_\* permissions have been 20:51:44

23      removed," and then it lists all of them? 20:51:48

24           A. I see a list of permissions, yes. 20:51:51

25           Q. And above that, there's also a number of 20:51:54

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1 other permissions. 20:51:58

2 Now, does this list of deprecated 20:52:02

3 permissions include all permissions that provided 20:52:05

4 for the sharing of friend data? 20:52:09

5 A. Can you -- in this context, can you help 20:52:19

6 me understand what you mean by "friends data"? 20:52:21

7 Q. Yeah. We earlier talked quite a bit about 20:52:25

8 different APIs that didn't have the word "friends" 20:52:27

9 in the permissions but, based on how they worked, 20:52:33

10 resulted in an app's ability to access information 20:52:35

11 about a user's friends. 20:52:39

12 Do you recall that testimony? 20:52:41

13 A. Yes, I recall that testimony. 20:52:42

14 Q. And so looking at this list here, does it 20:52:45

15 appear to you that this removes -- indicates that 20:52:47

16 the deprecated permissions will cover all of the 20:52:54

17 different permissions that existed at the time that 20:52:57

18 allowed access to friends data? 20:53:00

19 A. No. This looks relatively complete in 20:53:06

20 terms of the -- the friends permissions that 20:53:10

21 allowed an app access to a friend's data in terms 20:53:15

22 of the specific things listed here. 20:53:22

23 Your definition earlier was -- included 20:53:25

24 things like a friend's comments on my photos. 20:53:32

25 Through that definition, then other 20:53:40

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1 permissions, including, for example, user\_photos, 20:53:42  
2 would have also emitted some friends' data; 20:53:46  
3 specifically, the comments that they had made on my 20:53:55  
4 photos. 20:53:57

5 So that is not a set of things that was 20:53:58  
6 removed in API Version 2. 20:54:01

7 What was removed is this list of 20:54:03  
8 permissions which, for example, would have 20:54:05  
9 allowed -- the friends\_photos permission would have 20:54:08  
10 allowed an app to access the photos of an app-using 20:54:12  
11 user's friends. 20:54:17

12 Q. And at the time that Facebook was 20:54:19  
13 analyzing and identifying all of the permissions 20:54:20  
14 that provided access to friends data, did Facebook 20:54:25  
15 make a list that included every single one of those 20:54:30  
16 permissions so that it could identify whether there 20:54:33  
17 was any friend-sharing that would be still 20:54:37  
18 publicly -- still be a publicly available API? 20:54:41

19 A. No. The focus of the deprecations 20:54:48  
20 announced in Version 2 was the removal of the 20:54:50  
21 friend permissions and the other permissions that 20:54:53  
22 are represented here. 20:54:56

23 Q. Okay. And when you say "friend 20:54:59  
24 permissions," you mean the ones that had the word 20:55:00  
25 "friends" in them? 20:55:03

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1           A. When I said "friend permission," that 20:55:05  
2           specifically refers to the permissions that have 20:55:07  
3           the word "friend" in them. 20:55:10

4           And by "other permissions," I'm referring 20:55:12  
5           to the ones listed above; for example -- I'm trying 20:55:14  
6           to give an example -- like, manage\_friend lists, 20:55:27  
7           for example. 20:55:31

8           Q. Now, if we move up this document back to 20:55:33  
9           the first page, there's a heading: "New features 20:55:36  
10          available in Version 2.0." 20:55:40

11          Do you see that? 20:55:42

12          A. I do. 20:55:43

13          Q. And there is a list of APIs that we've 20:55:43  
14          discussed: "Taggable Friends, Invitable Friends, 20:55:47  
15          Social Context." 20:55:51

16          And there's one, "Business Mapping API," 20:55:51  
17          which we haven't discussed, and another one that 20:55:53  
18          looks like it says "Tagged Places API." 20:55:56

19          Do you see that? 20:55:59

20          A. I do see that. 20:55:59

21          Q. And for Taggable Friends, Invitable 20:56:01  
22          Friends, Social Context, those are all permissions 20:56:06  
23          that it appears did not exist prior to Version 2.0 20:56:09  
24          but were going to be introduced at this time. 20:56:13

25          Is that a fair read? 20:56:16

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1           A. These are specifically -- these are APIs           20:56:18  
2           that were introduced in Version 2 that were not           20:56:20  
3           previously available.           20:56:26

4           These are not permissions; these are APIs.           20:56:27

5           Q. And a number of those APIs that we've           20:56:29  
6           discussed did provide access to certain friend           20:56:31  
7           information of users not using the apps that would           20:56:33  
8           be -- that would have access to those APIs. Right?           20:56:36

9           A. So, yeah. If we go back to the           20:56:41  
10          previous -- the previous testimony I gave on this,           20:56:43  
11          the Taggable Friend API returned a list of the           20:56:47  
12          user's -- a list of the authorized user's friends           20:56:51  
13          that were taggable in the application.           20:56:58

14          The amount of data that these APIs           20:57:00  
15          returned was very, very limited. In the case of           20:57:03  
16          the Taggable Friend API, for example, the amount of           20:57:09  
17          data emitted was the name, a URL to a person's           20:57:13  
18          profile picture, and a token which could be passed           20:57:17  
19          back to the API to tag them in a post.           20:57:21

20          That was the extent of the information           20:57:24  
21          available via those APIs -- via the Taggable           20:57:26  
22          Friends API, in my recollection.           20:57:30

23          Q. And you say it's limited information, but           20:57:33  
24          it is still fairly described as "friends data."           20:57:36  
25          Right?           20:57:39

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1           A. It is some information about a friend or a           20:57:40  
2           list of friends.           20:57:45  
3           But I would draw a distinction between           20:57:47  
4           that and the friend permissions, which gated a very           20:57:50  
5           different set of information.           20:57:55  
6           Q. And we might need to blow it up a bit, but           20:57:59  
7           I'm interested in the Social Context API here, and           20:58:02  
8           I'll read it:           20:58:07  
9           "We've added a new endpoint to objects           20:58:09  
10           and apps that allow you to display a person's           20:58:12  
11           friend's actions on an object. For example,           20:58:16  
12           you might be able to answer the question           20:58:19  
13           'Which of my friends have watched this           20:58:20  
14           movie?' by looking at the           20:58:22  
15           /{movie-id}?fields=context endpoint."           20:58:24  
16           Did I more or less read that sentence           20:58:32  
17           accurately?           20:58:34  
18           A. You more or less read it accurately.           20:58:35  
19           Q. And what is an "endpoint"?           20:58:37  
20           A. An "endpoint" is another word to describe           20:58:42  
21           an API. It's a -- it's a -- a term used to           20:58:47  
22           describe an API that a developer could call.           20:58:54  
23           Q. And so using this example of the -- the           20:59:02  
24           movie ID context endpoint, it says:           20:59:07  
25           "For example, you might be able to answer           20:59:12

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1 the question, 'Which of my friend have 20:59:13  
2 watched this movie?'" 20:59:16  
3 So, technically, how would that app be 20:59:17  
4 able to answer that question with the Social 20:59:20  
5 Context API? 20:59:22  
6 A. As I talked about earlier, the precise way 20:59:26  
7 that the Social Context API worked is not something 20:59:30  
8 I am very familiar with. In fact, I am not even 20:59:35  
9 sure exactly when it existed and how it behaved. 20:59:41  
10 So, I think, like, details on exactly how 20:59:48  
11 the Social Context API worked, like, I don't think 20:59:50  
12 I can give a clear answer to. 20:59:53  
13 MR. LOESER: Mr. Cross, I'm noting for the 21:00:00  
14 record that I believe it is now 9:00 P.M. your 21:00:02  
15 time. Is that correct? 21:00:04  
16 THE WITNESS: It is. But I'm happy to do 21:00:05  
17 15 or 20 more minutes if that -- if that would help 21:00:08  
18 us get through stuff. 21:00:11  
19 If now is a convenient time to break for 21:00:13  
20 you, let's break. But if there was a convenient 21:00:15  
21 time to break for you that's 10, 15-minutes away, 21:00:17  
22 these -- let's do that. I don't want to -- 21:00:21  
23 MR. LOESER: Okay. I appreciate your 21:00:24  
24 flexibility, and I'll keep going, and we'll pretty 21:00:27  
25 quickly get through those 15 minutes. And that 21:00:31

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1 would probably be a good time in where I am to stop 21:00:34

2 anyway. So -- 21:00:37

3 THE WITNESS: Cool. Let's do that. 21:00:38

4 BY MR. LOESER: 21:00:39

5 Q. And, I should say, in order to go further, 21:00:39

6 it would take a lot longer than 15 minutes. So in 21:00:41

7 light of the schedule you have, I think that's a 21:00:44

8 good time to stop. 21:00:46

9 A. Okay. Great. 21:00:47

10 Q. Okay. This is a broad question, and we 21:00:48

11 can start big and go small. 21:00:52

12 But how did Facebook determine what apps 21:00:54

13 to whitelist for friend -- for providing access to 21:00:56

14 friend data? 21:01:03

15 A. Again, to clarify, what do you mean by 21:01:07

16 "friend data"? 21:01:09

17 Do you mean the friends permissions? 21:01:11

18 Q. I mean information about users who are not 21:01:14

19 the users of the app. 21:01:16

20 So whatever information made available via 21:01:19

21 the -- the permission to access the friends -- you 21:01:22

22 know, I'm going to garble the terminology every 21:01:30

23 time I try and do it. 21:01:33

24 But there's an API that grants -- that 21:01:35

25 provides, technically, access to friends 21:01:37

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1 information about the app's users. 21:01:39

2 And I'm interested in understanding when 21:01:41

3 Facebook put an app on a whitelist so that it 21:01:43

4 continued to access the data of a user's friends, 21:01:46

5 how it made that decision. 21:01:48

6 A. Okay. So -- 21:01:50

7 Q. And let me make it even easier for you. 21:01:52

8 The time period I'm interested in is in 21:01:55

9 the transition from Graph API Version 1 to 21:01:58

10 Version 2. 21:02:00

11 A. Okay. So let me -- let me -- let me try 21:02:01

12 and play back some -- some context, I think, is 21:02:07

13 important to the answer here. 21:02:10

14 So, first of all, as you have kind of 21:02:15

15 defined "friends data" and we've discussed it 21:02:20

16 earlier in this testimony, like, there are APIs 21:02:24

17 that were available publicly in Version 2 that 21:02:31

18 would have emitted some limited amount of 21:02:36

19 information about an app using users' friends. 21:02:40

20 For example, their comments on my photos 21:02:45

21 or limited information about them in order to 21:02:48

22 render a taggable -- a "tagging" user type ahead, 21:02:51

23 for example. 21:03:01

24 So, in this context, let me play back to 21:03:01

25 you -- I want to make sure I'm understanding your 21:03:04

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1 question correctly. 21:03:06

2 You are specifically referring to 21:03:09

3 permissions or behaviors that were no longer 21:03:10

4 available in Version 2 of the API, and you're 21:03:14

5 interested in applications that continued to have 21:03:17

6 access to the behaviors in API Version 1 after they 21:03:22

7 were no longer available to a nonwhitelisted 21:03:28

8 developer. 21:03:31

9 Do I have that correct? 21:03:32

10 Q. Correct. 21:03:34

11 A. Okay. Cool. 21:03:34

12 So having talked to people, the -- the -- 21:03:42

13 my understanding of how these decisions were -- how 21:03:48

14 these discussions happened is that there were a 21:03:54

15 number of developers who had been unable to update 21:03:58

16 their apps in time for the public API deprecation, 21:04:05

17 or that they -- that their use case -- they 21:04:11

18 required more time to migrate than was available 21:04:14

19 to -- to regular developers. 21:04:17

20 And so there were conversations had about 21:04:20

21 whether or not some of these applications should be 21:04:23

22 granted additional time to -- to migrate from the 21:04:27

23 API Version 1 behavior to the standard API 21:04:34

24 Version 2 behavior. 21:04:37

25 Q. And were any other considerations relied 21:04:40

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1 on by Facebook when determining whether to 21:04:47

2 whitelist an app? 21:04:49

3 A. Again, can we -- specifically for -- 21:04:53

4 for -- continued access to the API of V1 behavior 21:04:56

5 and permissions associated with API V1? 21:05:02

6 Q. Right. 21:05:06

7 A. My understanding was that the rationale 21:05:12

8 was based on whether or not the user experience 21:05:15

9 would be broken if the deprecation timeline was 21:05:17

10 followed or whether or not there would be other 21:05:23

11 risks for the developer of the deprecation being 21:05:28

12 enforced on the general time frame. 21:05:34

13 So those -- primarily, it was about 21:05:38

14 developers needing more time to migrate because, if 21:05:42

15 they -- if the enforcement and deprecations 21:05:45

16 happened on that publicly available timeline, there 21:05:49

17 would be negative impacts primarily for the user 21:05:52

18 experience of the people using the app -- 21:05:54

19 Q. And you -- sorry. Go ahead. 21:05:57

20 A. No, go on. 21:05:59

21 Q. You mentioned other risks for the 21:06:02

22 developer. 21:06:04

23 What were the other risks? 21:06:04

24 A. So one I recall was that there was an 21:06:07

25 application providing compliance services to people 21:06:17

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1 in the financial and insurance industry, and their 21:06:21  
2 customers would -- were still using their 21:06:25  
3 application in a certain way, and they needed more 21:06:31  
4 time to train their customers to not use the 21:06:34  
5 application in a certain way because the 21:06:39  
6 functionality they were relying upon would become 21:06:44  
7 unavailable when the API deprecations were applied 21:06:47  
8 to them. 21:06:54

9 Q. And what you described were considerations 21:06:56  
10 taken into account vis-à-vis developers. 21:07:01

11 But were there different considerations 21:07:05  
12 taken into account on whether to grant Facebook 21:07:06  
13 partners with continued access to publicly 21:07:10  
14 deprecated permissions? 21:07:13

15 A. Sorry. Say that again? 21:07:17

16 Q. So you indicated that the -- the -- there 21:07:20  
17 was extensions provided so apps could migrate to 21:07:23  
18 the new platform, and you spoke about that for a 21:07:26  
19 minute. 21:07:31

20 But I'm wondering if there were other 21:07:31  
21 considerations that were taken into account when 21:07:33  
22 discussing partners in particular and whether they 21:07:35  
23 should be provided continued access to publicly 21:07:39  
24 deprecated permissions. 21:07:42

25 A. My understanding is that there were some 21:07:46

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1 contractual agreements that specified a longer 21:07:48  
2 deprecation window than was available to -- than 21:07:54  
3 was offered to regular developers; and, as such, 21:07:58  
4 it's possible that some of the extensions to the 21:08:04  
5 deprecations were granted on that basis. 21:08:11

6 Q. And were there any other bases that 21:08:14  
7 Facebook had for providing continued access to 21:08:17  
8 publicly deprecated permissions to partners? 21:08:20

9 A. Can you define again what you mean by 21:08:24  
10 "partners" here? 'Cause all partners are 21:08:25  
11 developers in this context. 21:08:28

12 Q. I mean the entities that have been 21:08:31  
13 described by Facebook as "integration partners" 21:08:33  
14 or -- there are a variety of other categories of 21:08:36  
15 partner that Facebook uses. In fact, looking at 21:08:41  
16 your notes, you have "integration partners, 21:08:44  
17 business integrations, media integrations, search 21:08:47  
18 integrations." 21:08:49

19 So with regard to any of those categories, 21:08:51  
20 were there other considerations taken into account 21:08:54  
21 by Facebook when deciding whether to provide 21:08:57  
22 continued access to the publicly deprecated 21:09:00  
23 permissions? 21:09:02

24 A. So I think what's important to understand 21:09:04  
25 here is that -- let's take integration partners, 21:09:06

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1           for example. 21:09:10

2                   They had -- they had always had access to 21:09:11

3           some permission -- some APIs that were not 21:09:16

4           available to regular developers because they were 21:09:22

5           rebuilding a Facebook replacement client experience 21:09:24

6           on their devices. 21:09:28

7                   So "integration partners" as has been, you 21:09:30

8           know, defined in the -- in the documents, were 21:09:35

9           already on several whitelists in order to provide 21:09:38

10          the experience that they offered to users. 21:09:46

11                   So that's my understanding of how 21:09:54

12          integration partners continued to have access to 21:09:56

13          the -- the private APIs and behaviors they had 21:10:00

14          always had access to that were not available to 21:10:04

15          regular developers. 21:10:07

16                   Q. Okay. And, again, I want to make sure I'm 21:10:09

17          using the right terminology, and I'm talking about 21:10:13

18          continued access to friend data. 21:10:16

19                   So you've just described the continued 21:10:17

20          access that integration partners had to friend 21:10:19

21          data. 21:10:22

22                   Were there considerations that Facebook 21:10:22

23          took into account when deciding whether the other 21:10:24

24          types of partners that we just went through had 21:10:26

25          continued access to friend data? 21:10:29

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1           A. My understanding from talking to the           21:10:35  
2           people involved in this at the time, plus my own           21:10:37  
3           experience, is that the extensions granted to           21:10:40  
4           applications to access API Version 1 and the friend           21:10:46  
5           permissions was limited to cases where the user           21:10:51  
6           experience would be significantly degraded if they           21:10:54  
7           weren't given extra time or there was some form of           21:10:57  
8           legal and regulatory risk to the partner if the           21:11:02  
9           extension was not granted for a period of time.           21:11:05

10                 But remember that there -- you know, there           21:11:09  
11           were other reasons to -- there were other           21:11:11  
12           deprecations and changes in the API behavior that           21:11:15  
13           were not related to the deprecation of the friend           21:11:18  
14           permissions. I think that's really important to           21:11:20  
15           understand.           21:11:22

16                 Q. Right. And I perhaps led us astray with           21:11:23  
17           the terminology I was using.           21:11:26

18                 And, really, what I'm asking -- and you           21:11:28  
19           can tell me if it changes any of your answers --           21:11:30  
20           but I'm looking for the reasons Facebook had to           21:11:33  
21           provide continued access to friend data by anyone           21:11:36  
22           after the transition to Version 2.           21:11:39

23                 And we've talked about apps, and we've           21:11:41  
24           talked about business partner -- or integration           21:11:43  
25           partners and business integrations.           21:11:47

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1 And so just more broadly put, have you 21:11:51  
2 given me the full list of reasons that Facebook 21:11:53  
3 used when deciding whether to provide continued 21:11:58  
4 access to friend data after the transition to 21:12:00  
5 Version 2? 21:12:06

6 A. So I provided -- friend data in 21:12:08  
7 Version 2 -- like, again, I think it's important to 21:12:13  
8 separate these things. Right? 21:12:20

9 You're asking a compound question that's, 21:12:23  
10 like, somewhat impossible to answer with -- given 21:12:25  
11 your definition of "friend data" and given the 21:12:30  
12 variety of different applications we're talking 21:12:32  
13 about here and the complexity of the whitelists -- 21:12:35  
14 the various whitelists that these apps were on. 21:12:37

15 So, like, I think your question is hard to 21:12:41  
16 answer in -- in simple terms given your definition 21:12:44  
17 of "friend data." 21:12:49

18 Q. And you're saying that because my 21:12:53  
19 definition includes the types of data that's 21:12:54  
20 provided with regard to APIs other than the friends 21:12:58  
21 permissions specifically and includes groups and 21:13:02  
22 events and social context and all of that, or is 21:13:04  
23 there some other complication? 21:13:08

24 A. That's primarily the complication. Like, 21:13:10  
25 integration partners, the primary use case there is 21:13:12

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1       that these are experiences that are designed to       21:13:21  
2       replicate the Facebook experience on another mobile       21:13:29  
3       device platform, set-top box, or so on.       21:13:33

4               And those folks would have access to --       21:13:39  
5       always had access to information that wasn't       21:13:45  
6       available via the -- via the standard APIs. So       21:13:46  
7       that's one class of things.       21:13:51

8               Then there is the general deprecation --       21:13:56  
9       the general changes -- the whole package of changes       21:14:01  
10      from Version 1 to Version 2, which included the       21:14:04  
11      deprecation of the friend permissions, a number of       21:14:07  
12      other changes, including app-scoped user IDs and so       21:14:10  
13      on.       21:14:15

14              So in terms of granting extensions to the       21:14:15  
15      API Version 1 to Version 2 transition, from talking       21:14:20  
16      about all of -- from talking to all of the people       21:14:24  
17      involved to the -- as many people as I could that       21:14:26  
18      were involved at the time, the rationale for       21:14:29  
19      granting an extension is that it was a belief that       21:14:33  
20      the user experience would be severely degraded if       21:14:37  
21      the app wasn't given extra time to migrate from API       21:14:44  
22      Version 1 to Version 2.       21:14:48

23              Regular developers had a year. There were       21:14:51  
24      some applications, it was determined, that would --       21:14:54  
25      would provide a broken user experience if they       21:14:57

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1 weren't given more time to upgrade. 21:14:59

2 And that was the determination based on, 21:15:03

3 again, speaking to the people involved, the 21:15:06

4 degradation in the user experience that would 21:15:08

5 result, or whether or not there was risk around, 21:15:10

6 like, legal and regulatory use of the Platform that 21:15:17

7 required extra time to unwind. 21:15:23

8 That's my understanding of the -- the 21:15:27

9 reasons why some applications were granted 21:15:29

10 additional time to migrate from Version 1 to 21:15:33

11 Version 2. 21:15:36

12 Q. And so those are all of the reasons that 21:15:38

13 Facebook had for providing continued access to 21:15:40

14 friend data for apps and partners after the 21:15:45

15 transition to Version 2. 21:15:51

16 MR. BLUME: Objection to form. 21:15:54

17 THE WITNESS: The answer I just gave was 21:15:55

18 in -- in two parts. 21:15:58

19 Part one is: Integration partners who had 21:16:01

20 built experiences that were on unusual devices, 21:16:06

21 operating systems, and set-top boxes and so on that 21:16:13

22 required, in order to function, always, permissions 21:16:16

23 which -- APIs that were not generally available. 21:16:22

24 The use of those APIs and permissions was 21:16:31

25 governed by contracts, typically. That's what 21:16:34

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1 determined an integration partner, and they were 21:16:37  
2 considered as operating on a different set of 21:16:40  
3 permissions and APIs than the public API surface 21:16:46  
4 area. 21:16:51

5 The second part of your question was 21:16:51  
6 determining extensions to Version-- the Version 1 21:16:53  
7 to Version 2 deprecation timeline where Version 1 21:16:57  
8 included friends permissions and Version 2 did not 21:17:01  
9 include the friends permissions. 21:17:06

10 And my understanding from talking to the 21:17:08  
11 people involved is that the reason for granting 21:17:11  
12 extensions to the standard Version 1 deprecation 21:17:14  
13 window was to do with degradation of the user 21:17:17  
14 experience and/or a few cases where the use of the 21:17:21  
15 API was involved in compliance use cases. 21:17:30

16 I -- it's possible that there are other 21:17:35  
17 reasons, but having talked to people and reviewed 21:17:38  
18 the documents in this case, it's consistent with 21:17:43  
19 that understanding as -- as referring to the friend 21:17:46  
20 permissions deprecations. 21:17:48

21 BY MR. LOESER: 21:17:52

22 Q. And, again, I just want to -- trying to 21:17:52  
23 make a record and make the record clear, and I'm 21:17:54  
24 trying to understand every type of entity -- call 21:17:57  
25 it a partner, call it a developer, call it an 21:18:01

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1 app -- that continued to have access to friend data 21:18:04  
2 after the transition from Version 1 to Version 2. 21:18:07  
3 And you have described a couple different 21:18:10  
4 types of entities. You've described apps and 21:18:12  
5 business integrations, and you've described 21:18:15  
6 extensions that were provided to some; and for 21:18:19  
7 integrations, access that existed before and 21:18:23  
8 existed after. 21:18:26  
9 And what I'm trying to pin down is, is 21:18:27  
10 there any other category of third party that 21:18:30  
11 continued to have access to friend data after the 21:18:36  
12 transition to Version 2? 21:18:39  
13 Are there any other reasons that Facebook 21:18:42  
14 had for providing continued access to those 21:18:46  
15 categories? 21:18:48  
16 MR. BLUME: Objection. Form. 21:18:49  
17 THE WITNESS: So I -- it -- I think 21:18:53  
18 we're -- you're mixing up here the friend 21:18:55  
19 permissions, right, and the permissions that were 21:18:59  
20 used in the API to govern access to the data 21:19:02  
21 exposed via those permissions from friends data in 21:19:07  
22 the more general sense that you defined it earlier 21:19:13  
23 in this -- when we discussed earlier in this 21:19:17  
24 testimony. 21:19:20  
25 Like, it's -- I'm -- 21:19:20

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1 BY MR. LOESER: 21:19:23

2 Q. Let's go back. Let me make it easier. 21:19:23

3 Let's put that aside for a moment, the 21:19:25

4 other APIs that are not categorized as friend 21:19:27

5 permissions, and just talk about friends; the APIs 21:19:30

6 that were on that list that were deprecated. 21:19:34

7 Other than the -- the third parties you've 21:19:37

8 already described, are there any other categories 21:19:40

9 of partner or developer or third party at all that 21:19:42

10 had continued access to those permissions after the 21:19:48

11 transition? 21:19:52

12 And if so -- let's stop with that. Let's 21:19:53

13 start with that half of the question. 21:19:58

14 A. Okay. So my understanding is that the 21:20:01

15 ability of applications to request the friend 21:20:04

16 permissions from users, which is, again, how this 21:20:08

17 works, right? We're talking specifically about the 21:20:11

18 friend permissions. These are things that apps 21:20:14

19 could request users to grant to the application. 21:20:17

20 My understanding is that the reasons for 21:20:22

21 continuing to allow apps to request the friend 21:20:26

22 permissions from users was limited to applications 21:20:31

23 that needed additional time to -- to migrate. 21:20:38

24 The -- and we've gone through the reasons for that. 21:20:42

25 Q. Okay. And there's -- and you also 21:20:50

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1 described business integrations, and you gave the 21:20:52  
2 reason for that. 21:20:54

3 And I just want to make sure that there's 21:20:55  
4 not any other category of partner, according to 21:20:58  
5 Facebook, that continued to have access to those 21:21:00  
6 permissions that were whitelisted. 21:21:03

7 A. So when apps were whitelisted -- if an app 21:21:08  
8 was whitelisted to continue to have access to 21:21:12  
9 Version 1, then it could continue to request those 21:21:15  
10 permissions from some users. 21:21:18

11 So by being granted an exception -- an 21:21:21  
12 extension to the deprecation timeline window, 21:21:25  
13 applications that were whitelisted to continue to 21:21:30  
14 have access to Version 1 could continue to access 21:21:33  
15 the friend -- could continue to request the friends 21:21:37  
16 permissions from users until that access was -- was 21:21:39  
17 removed. 21:21:43

18 And my understanding is that the reason 21:21:45  
19 for that was to give those apps extra time to 21:21:50  
20 migrate to prevent degradation to the user 21:21:54  
21 experience. 21:21:58

22 There are apps on -- I've been through the 21:22:00  
23 list of applications that were granted an 21:22:03  
24 extension, and a good example of that -- an 21:22:05  
25 application in that category was, like, the -- an 21:22:14

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1 integration with car manufacturers and their head 21:22:18  
2 unit so you could access some kind of Facebook 21:22:22  
3 experience inside your car. 21:22:25

4 It's very hard to update the software on 21:22:27  
5 those devices, and they needed more time. 21:22:29

6 So that's my understanding of, like, the 21:22:37  
7 reason why extensions were granted; to give more -- 21:22:40  
8 developers more time to upgrade, given the changes 21:22:44  
9 in the API that would affect them -- not just the 21:22:47  
10 friends permissions, but other changes between 21:22:50  
11 Version 1 and Version 2, and that's why the 21:22:53  
12 extensions were granted. 21:22:57

13 Q. I'm not trying to get you to repeat the 21:23:04  
14 same testimony. I am simply trying to make sure 21:23:06  
15 that we've exhausted Facebook's reasons for 21:23:09  
16 whitelisting and the categories of apps or partners 21:23:12  
17 that were whitelisted. 21:23:16

18 And so there's nothing else to add to that 21:23:18  
19 from Facebook's perspective? 21:23:20

20 A. So the -- in terms of, like, whitelisting 21:23:24  
21 extensions to Version 1, there are other reasons 21:23:27  
22 why an app might be whitelisted, but that's 21:23:33  
23 generally not to do with their use of the friend 21:23:37  
24 permissions. 21:23:39

25 Q. Was it something to do with their use of 21:23:42

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1 other deprecated permissions? 21:23:44

2 A. Other changes in behavior from Version 1 21:23:47

3 to Version 2. For example, app-scoped user IDs. 21:23:49

4 Big change to how the Facebook Developer Platform 21:23:55

5 operated. As I say, there's a whole number of 21:23:58

6 changes between Version 1 and Version 2. 21:24:02

7 Your question was about friends 21:24:04

8 permissions, and there are other reasons why some 21:24:06

9 apps were granted an extension. And my 21:24:09

10 understanding is that, you know, the reasons for 21:24:12

11 granting an extension to the friend permissions is 21:24:16

12 because of a user experience degradation and 21:24:19

13 striking a balance of giving more time -- those 21:24:23

14 developers more time to update their use of the 21:24:26

15 Platform or cases where the use of the Platform was 21:24:29

16 related to -- where the friend permissions were 21:24:33

17 used in the context of, like, regulated industries. 21:24:39

18 As I say, there are a number of developers 21:24:44

19 also whitelisted for continued access to Version 1 21:24:46

20 because of their use of other -- because of 21:24:50

21 their -- because of them being affected by other 21:24:53

22 changes in the API between Version 1 and Version 2. 21:24:55

23 MR. LOESER: Okay. Mr. Cross, we're at 21:25:07

24 now 9:25 your time, and I want to be sensitive to 21:25:09

25 your schedule. 21:25:12

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1	So we're more than happy to keep going,	21:25:13
2	but if you want to stop, it's getting late for you.	21:25:16
3	So --	21:25:19
4	THE WITNESS: Yeah, now is a good time. I	21:25:19
5	can feel my voice going, and this stuff is	21:25:21
6	important to get right. So I think it's a good	21:25:24
7	moment to pause and then come back and continue on	21:25:27
8	Thursday.	21:25:30
9	MR. LOESER: Okay. Well, thank you for	21:25:31
10	your time this evening, and we'll start again on	21:25:33
11	Thursday.	21:25:35
12	THE VIDEO OPERATOR: And we're off the	21:25:38
13	record. It's 9:25 P.M.	21:25:39
14	(Time noted, 9:25 P.M. London Daylight	21:25:41
15	Time)	21:25:43
16		
17	--o0o--	
18		
19		
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21		
22		
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24		
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--o0o--

I declare under penalty of perjury that the foregoing is true and correct. Subscribed at \_\_\_\_\_, California, this \_\_\_\_ day of \_\_\_\_\_ 2022.

\_\_\_\_\_  
SIMON CROSS

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## CERTIFICATE OF REPORTER

I, HOLLY THUMAN, a Certified Shorthand Reporter, hereby certify that the witness in the foregoing deposition was by me duly sworn to tell the truth, the whole truth, and nothing but the truth in the within-entitled cause; that said deposition was taken down in shorthand by me, a disinterested person, at the time and place therein stated; and that the testimony of said witness was thereafter reduced to typewriting by computer, to the best of my ability via remote videoconferencing, under my direction and supervision;

That before completion of the deposition review of the transcript [] was [X] was not requested/offered. If requested, any changes made by the deponent (and provided to the reporter) during the period allowed are appended hereto.

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto.

DATED: May 12, 2022



HOLLY THUMAN, CSR

DEREK W. LOESER, ESQ.

dloeser@kellerrohrback.com

May 12, 2022

IN RE: FACEBOOK, INC., CONSUMER PRIVACY USER PROFILE LITIGATION

MAY 9, 2022, SIMON CROSS, JOB NO. 5210141

The above-referenced transcript has been  
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\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Contact Veritext  
to schedule a time to review the original transcript at  
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The witness should then sign and date the errata and penalty  
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appearing counsel within the period of time determined at  
the deposition or provided by the Code of Civil Procedure.

\_\_\_ Waiving the CA Code of Civil Procedure per Stipulation of  
Counsel - Original transcript to be released for signature  
as determined at the deposition.

\_\_\_ Signature Waived - Reading & Signature was waived at the  
time of the deposition.

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3     make any necessary corrections on the errata pages included  
4     below, notating the page and line number of the corrections.  
5     The witness should then sign and date the errata and penalty  
6     of perjury pages and return the completed pages to all  
7     appearing counsel within the period of time determined at  
8     the deposition or provided by the Federal Rules.  
9     \_X\_Federal R&S Not Requested - Reading & Signature was not  
10    requested before the completion of the deposition.

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IN RE: FACEBOOK, INC., CONSUMER PRIVACY USER PROFILE LITIGATION

SIMON CROSS, JOB NO. 5210141

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Date

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**[api - application]**

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[whitelist - à]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

-----  
This document relates to:  
ALL ACTIONS  
-----

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ZOOM DEPOSITION OF FACEBOOK's 30(b)(6)  
CORPORATE REPRESENTATIVE - SIMON CROSS  
(Reported Remotely via Video & Web Videoconference)  
London, England (Deponent's location)  
Thursday, May 12, 2022  
Volume II

STENOGRAPHICALLY REPORTED BY:  
REBECCA L. ROMANO, RPR, CSR, CCR  
California CSR No. 12546  
Nevada CCR No. 827  
Oregon CSR No. 20-0466  
Washington CCR No. 3491  
JOB NO. 5219195  
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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

-----  
This document relates to:  
ALL ACTIONS  
-----

DEPOSITION OF SIMON CROSS, taken on  
behalf of the Plaintiffs, with the deponent located  
in London, England, commencing at  
2:36 p.m., Thursday, May 12, 2022, remotely  
reported via Video & Web videoconference before  
REBECCA L. ROMANO, a Certified Shorthand Reporter,  
Certified Court Reporter, Registered Professional  
Reporter.

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APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

KELLER ROHRBACK L.L.P.

BY: DEREK W. LOESER

BY: CARI CAMPEN LAUFENBERG

BY: ADELE A. DANIEL

BY: EMMA WRIGHT

Attorneys at Law

1201 Third Avenue

Suite 3200

Seattle, Washington 98101

(206) 623-1900

dloeser@kellerrohrback.com

claufenberg@kellerrohrback.com

adaniel@kellerrohrback.com

ewright@kellerrohrback.com

/////



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APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

BLEICHMAR FONTI & AULD LLP

BY: ANNE K. DAVIS

BY: LESLEY E. WEAVER

Attorneys at Law

555 12th Street

Suite 1600

Oakland, California 94607

(415) 445-4003

adavis@bfalaw.com

lweaver@bfalaw.com

/////

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1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)  
3  
4 For Facebook, Inc.:  
5 GIBSON, DUNN & CRUTCHER LLP  
6 BY: ROBERT C. BLUME  
7 BY: HANNAH REGAN-SMITH  
8 Attorneys at Law  
9 1801 California Street  
10 Suite 4200  
11 Denver, Colorado 80202-2642  
12 (303) 298-5735  
13 rblume@gibsondunn.com  
14 hregan-smith@gibsondunn.com  
15 and  
16 COLIN B. DAVIS  
17 Attorney at Law  
18 3161 Michelson Drive  
19 Irvine, California 92612-4412  
20 (949) 451-3993  
21 cdavis@gibsondunn.com  
22  
23  
24  
25 //

CONFIDENTIAL

1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)

3

4 For Facebook, Inc.:

5 GIBSON DUNN & CRUTCHER LLP

6 BY: MATT BUONGIORNO

7 Attorney at Law

8 2001 Ross Avenue

9 Suite 2100

10 Dallas, Texas 75201

11 (214) 698-3204

12 mbuongiorno@gibsondunn.com

13 and

14 BY: PHUNTSO WANGDRA

15 Attorney at Law

16 1881 Page Mill Road

17 Palo Alto, California 94304-1211

18 (650) 849-5206

19 pwangdra@gibsondunn.com

20

21

22

23

24

25 //

CONFIDENTIAL

1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)  
3

4 JAMS  
5 BY: DANIEL B. GARRIE  
6 Special Master  
7 555 W. 5th Street  
8 32nd Floor  
9 Los Angeles, California 90013  
10 (213) 253-9706  
11 dgarrie@jamsadr.com  
12  
13  
14

15 ALSO PRESENT:  
16 Ian Chen, Associate General Counsel, Facebook  
17 Inc.  
18 John Macdonell, Videographer  
19  
20  
21  
22  
23  
24

25 /////

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## I N D E X

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## DESCRIPTION

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Criteria Review,

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FB-CA-MDL-02951294;

Exhibit 339	PowerPoint Presentation -	361
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facebook Criteria for

granting Exemptions and

Extensions Drat 12/5/13

Monica Mosseri,

FB-CA-MDL-02951295;

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1	E X H I B I T S(cont'd)		
2	NUMBER		PAGE
3		DESCRIPTION	
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5		Criteria for granting	
6		Exemptions and Extensions	
7		Draft 12/5/13 Monica Mosseri,	
8		META-CA-MDL-000041190 -	
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11	Exhibit 341	Deprecated f8 2014	393
12		Partnerships/Ops XFN,	
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14		FB-CA-MDL-02978571;	
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16	Exhibit 342	Email dated January 27, 2014	433
17		Subject: platform model	
18		changes, FB-CA-MDL-00202269;	
19			
20	Exhibit 343	Email String Subject:	472
21		Changing App Settings//Friend	
22		Permissions,	
23		FB-CA-MDL-01462921 -	
24		FB-CA-MDL-01462921;	
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1	E X H I B I T S(cont'd)		
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3		DESCRIPTION	
4	Exhibit 344	Email String Subject: [a/c	483
5		priv Re: WSJ story on API	
6		migration, FB-CA-MDL-01169155	
7		- FB-CA-MDL-01169173;	
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10	PREVIOUSLY MARKED EXHIBITS		
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12	Exhibit 5		243
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1 London, England; May 12, 2022

2 2:36 p.m.

3 ---o0o---

4 THE VIDEOGRAPHER: Okay. We're on the

5 record. It's 2:36 p.m., the time in London, on 02:36:47

6 May 12th, 2022. This is the deposition of

7 Simon Cross, Volume II.

8 We're here in the matter of In Re:

9 Facebook, Inc. Consumer Privacy User Profile

10 Litigation. 02:37:00

11 I'm John Macdonell, the videographer with

12 Veritext. Before the reporter swears the witness,

13 would counsel please identify themselves, beginning

14 with the noticing attorney, please.

15 MR. LOESER: Good morning. This is 02:37:16

16 Derek Loeser from Keller Rohrback, and with me is

17 Adele Daniel and Cari Laufenberg, also from

18 Keller Rohrback.

19 MR. BLUME: Rob Blume with Gibson Dunn on

20 behalf of Facebook. And with me is Ian Chen, 02:37:28

21 client representative, as well, as Phuntso Wangdra,

22 Hannah Regan-Smith, Colin Davis. And I believe

23 that's all at the moment.

24 SPECIAL MASTER GARRIE: And you have

25 Special Master Garrie as a representative of the 02:37:45

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1 court. 02:37:47

2 Good morning, Counsel Chen. Good

3 morning, Counsel Davis.

4 It's been a while since I've seen you,

5 Counsel Davis. 02:37:53

6 I will turn it over to the parties

7 without further adieu.

8 THE COURT REPORTER: At this time, I will

9 ask counsel to agree on the record that there is no

10 objection to this deposition officer administering 02:38:01

11 a binding oath to the deponent via remote

12 videoconference, starting with the noticing

13 attorney, please.

14 MR. LOESER: No objection. Thank you.

15 MR. BLUME: No objection from Facebook. 02:38:18

16 THE COURT REPORTER: Mr. Cross, if you

17 could raise your right hand for me, please.

18 THE DEPONENT: (Complies.)

19 THE COURT REPORTER: You do solemnly

20 state, under penalty of perjury, that the testimony 02:38:19

21 you are about to give in this deposition shall be

22 the truth, the whole truth and nothing but the

23 truth?

24 THE DEPONENT: I do.

25 ///// 02:38:35

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1 reviewed as many of them as I could. 02:39:26

2 Q. Okay. And that's the same set that -- I  
3 didn't send any new ones so those are the same  
4 documents that -- that were provided in advance of  
5 your testimony on Monday. 02:39:36

6 So had you seen -- your review this time,  
7 was that the first time you had seen some of those  
8 documents?

9 A. I think so, yeah. Maybe I'll ask my --  
10 my counsel to -- to confirm. 02:39:48

11 MR. BLUME: Yeah. And -- and this is --  
12 this is Mr. Blume.

13 I actually think you did send an  
14 additional set over, but we can check that.

15 MR. LOESER: Okay. Well, we can talk 02:40:00  
16 about that later because if we did; it's news to  
17 us. But that's okay, we'll figure that out.

18 Q. (By Mr. Loeser) All right. Mr. Cross,  
19 you'll recall on Monday we spent a good deal of  
20 time with my questions about the reason Facebook 02:40:17  
21 decided to whitelist certain apps from partners so  
22 that those partners would be able to access  
23 publicly deprecated permissions after Graph API  
24 version 2 became operative.

25 Do you -- do you recall those questions 02:40:30

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1 and -- and your testimony? 02:40:31

2 A. I recall the discussion, generally.

3 Q. And you recall that -- that I  
4 specifically asked about friend permissions, right?

5 A. We had a number of discussions about 02:40:42  
6 friend permissions, yes.

7 Q. And I asked you to tell me all the  
8 reasons that Facebook decided to allow certain apps  
9 and partners to have access to friend permissions  
10 after the transition to Graph API version 2, right? 02:40:51

11 Do you recall that?

12 A. I recall a question of that nature.

13 Q. Okay. And you recall that you answered  
14 that question?

15 A. I recall answering a question of that 02:41:02  
16 nature.

17 Q. And at the end of the day -- and this --  
18 and this is why I'm bringing this up -- you said  
19 something -- and I just wanted to read to you what  
20 you said and make sure I understand your testimony. 02:41:11

21 You explained that -- and I'm going to  
22 quote here for -- for a minute.

23 "As I say, there are a number of  
24 developers also whitelisted for continued access to  
25 version 1 because of their use of other -- because 02:41:24

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1 of their -- because of them being affected by other 02:41:27  
2 changes in the API between version 1 and  
3 version 2."

4 Do you recall that testimony?

5 A. That sounds reasonable, yes. 02:41:36

6 Q. And -- and before moving on, I just want  
7 to make sure I -- I understand what you meant by  
8 that. So I'll give it a try and you can tell me if  
9 I've got it right.

10 Some apps and partners were given 02:41:48  
11 whitelist access to friend permissions. And we  
12 talked about the reasons for that. And others were  
13 given whitelist access to other permissions that  
14 were being deprecated, right?

15 A. Not necessarily other permissions that 02:42:02  
16 were being deprecated.

17 Q. Okay. Explain -- explain what -- what  
18 you mean there.

19 A. There were some other features of  
20 Graph API version 2, where API version 2 differed 02:42:17  
21 from version 1.

22 One of those changes, for example, was  
23 the transition from canonical Facebook user IDs to  
24 app-scoped user IDs. A number of developers  
25 had a -- had a challenge with that migration and 02:42:34

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1 needed extra time. 02:42:37

2 Q. Okay. And can you explain what -- what  
3 canonical IDs are and -- and hashed?

4 A. So when I say "canonical" Facebook user  
5 ID, that's the -- the Facebook user ID that 02:42:50

6 uniquely represents a user in the Facebook  
7 database. And it's the -- the same user ID that's  
8 used inside Facebook's internal systems and was the  
9 API -- the user ID that would have been admitted in  
10 the original version of the Facebook developer 02:43:11

11 platform.

12 In version 2, there was a transition from  
13 admitting canonical user IDs to committing -- to  
14 admitting app-scoped user IDs. The precise nature  
15 in which that transition occurred is -- is -- is 02:43:28

16 relatively complicated. I can go into in -- if you  
17 need to.

18 But in simple terms, where in version 2  
19 we might admit a user ID which was unique between  
20 the specific user and the specific application, 02:43:47  
21 that was making the API call.

22 Q. Okay. And what was the purpose of that  
23 change?

24 A. The purpose of that change was to make it  
25 harder for developers to aggregate information 02:44:00

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1 across multiple Facebook application IDs and make 02:44:08  
2 it easier where user IDs had been admitted to  
3 identify which application they had been admitted  
4 by.

5 Q. Okay. And why did Facebook want to make 02:44:21  
6 that harder?

7 Why did Facebook want to make it harder  
8 to aggregate ID information?

9 A. My understanding is that there were a  
10 number of concerns about applications being able 02:44:36  
11 to, for example, [REDACTED]  
12 [REDACTED] for example, and the migration to  
13 app-scoped user IDs made that harder. So that's  
14 one example.

15 Q. And were privacy concerns -- Facebook 02:45:05  
16 user privacy concerns another reason for that  
17 change?

18 A. One of the advantages of app-scoped user  
19 IDs were admitted is that you could understand  
20 which application had admitted them, and that might 02:45:21  
21 make it easier to track if information was being  
22 misused.

23 Q. And was misuse of information, based upon  
24 the aggregation of user IDs, a problem that  
25 Facebook had identified with Graph API version 1? 02:45:38

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1 A. One of the -- 02:45:45

2 MR. BLUME: Sorry. I missed my mute  
3 button.

4 I just object to scope.

5 THE DEPONENT: Yeah, I'm not aware of 02:45:56  
6 exactly what the -- the company's position on that  
7 is.

8 From a personal capacity, I recall that  
9 the aggregation of user data or cross-applications  
10 being a concern that was raised at the time. 02:46:12

11 Q. (By Mr. Loeser) One last thing to make  
12 clear from your testimony on Monday.

13 I asked you -- and we had a obviously  
14 lengthy discussion about whitelisting as a means of  
15 providing access to publicly deprecated 02:46:26  
16 permissions, right?

17 A. We had a conversation about permissions  
18 for sure.

19 Q. And you'll also recall that I asked you  
20 about private APIs with partners. 02:46:35

21 Do you recall that?

22 A. We had a number of discussions about  
23 private APIs.

24 Q. Okay. And private APIs are APIs that are  
25 made available to certain partners, but are not 02:46:46

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1 publicly available; is that right? 02:46:49

2 A. I think a reasonable description of a  
3 private API is an API that's not available to -- to  
4 all developers and only available to some.

5 Q. And -- and some of the partners -- some 02:47:01  
6 of Facebook's partners, prior to the transition to  
7 Graph API version 2, already had private APIs with  
8 Facebook; is that right?

9 A. There are a number of partners that had  
10 built experiences that would only be possible if 02:47:18  
11 they had been granted access to -- to private APIs.

12 Q. So your answer is "yes"?

13 A. I -- I think it's -- there -- there were  
14 entities -- third parties that had built  
15 applications that re- -- would -- would have 02:47:39  
16 required access to private APIs.

17 Q. And -- and I don't mean to belabor the  
18 point, but I'm trying to get to a "yes."

19 So I think you just answered  
20 affirmatively. Am I interpreting your question -- 02:47:48  
21 your answer correctly?

22 A. Ask your question again so I can make  
23 sure I am like -- I want to make sure I -- I --  
24 I -- when I give a yes, I want to make sure I fully  
25 agree with what you're -- you're asking me about. 02:48:00

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1 Q. Sure. 02:48:02

2 I asked you, some of Facebook's partners,  
3 prior to the transition to Graph API version 2,  
4 already had private APIs with Facebook; is that  
5 right? 02:48:12

6 A. That's right.

7 Q. However, some partners that entered into  
8 or were provided access to private APIs, after the  
9 transition to Graph API version 2, did not  
10 previously have access to private APIs, right? 02:48:24

11 MR. BLUME: Objection. Scope.

12 THE DEPONENT: Yeah. I -- I'm not sure  
13 I -- how -- how to answer that -- how to answer  
14 that question.

15 It's unclear as to the exact form of 02:48:39  
16 scope you mean.

17 Can you -- can you ask it again so I can  
18 try and understand.

19 Q. (By Mr. Loeser) Sure. Sure.

20 I'm just trying to understand how private 02:48:51  
21 APIs were used.

22 So you had some partners that already had  
23 them before the transition. And you had some  
24 partners that, for the first time with the  
25 transition, were provided access to private APIs, 02:48:59

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1 right? 02:49:03

2 A. One of the challenges in answering the --

3 the question is that part of the transition from

4 version 1 to version 2 is when something is

5 publicly deprecated it becomes -- you might 02:49:16

6 consider that to be a private API.

7 And in order to continue accessing --

8 accessing that feature for some time, they would be

9 added to a whitelist that would give them access to

10 what would then be considered a private API. 02:49:36

11 Q. Okay. And that's exactly what I'm trying

12 to make sure the record is clear on.

13 So there were some partners that had

14 access to friend permissions, for example, under a

15 Graph API version 1 through the -- the permissions 02:49:51

16 that were publicly available, right?

17 A. That's correct.

18 Q. And then in the transition, those

19 publicly available -- publicly available

20 permissions were deprecated. And in order for them 02:50:02

21 to continue having access to friend permissions,

22 they were able to obtain that access through --

23 through private APIs after the transition; is that

24 right?

25 A. To be -- to be clear, there's a 02:50:19

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1 difference between private API and permissions 02:50:21

2 different -- slightly different concepts.

3 So in -- in the case that if an app

4 wanted to continue to have access to a permission

5 that had been publicly deprecated from -- or 02:50:39

6 publicly removed from most other applications in

7 order to continue accessing data under that

8 permission or requesting that permission from

9 users, after some time it would have had to be on

10 the whitelist. 02:50:58

11 Q. Okay. And so when you use the phrase

12 "whitelist," now, you're -- you're -- you're

13 referring to whitelist via a private API as well,

14 right?

15 A. No. I'm referring in this case in -- in 02:51:10

16 my definition of whitelisting -- my use of

17 whitelisting in this case refers to an application

18 being added to a whitelist in the form of a

19 capability or some other internal gating system.

20 Q. Okay. So if you were going to create a 02:51:28

21 list of all of the partners -- Facebook partners

22 that had private APIs, would you consider all of

23 the partners who obtained access to publicly

24 deprecated permissions as having been whitelisted?

25 A. In order to access publicly deprecated 02:51:52

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1 APIs or permissions, once they had been publicly 02:51:55  
2 deprecated, a developer would need to be on a  
3 whitelist.

4 Q. And -- and I don't want you to repeat  
5 your earlier testimony. I just want you to confirm 02:52:10  
6 that you have told me all the reasons that Facebook  
7 decided to allow certain partners to obtain friend  
8 data after the transition to Graph API version 2,  
9 via private APIs.

10 A. Sorry. Can you just repeat the question 02:52:24  
11 again.

12 Q. Sure.

13 I just want to make sure the record's  
14 clear. I asked you a lot of questions about the  
15 reasons why Facebook decided to continue allowing 02:52:30  
16 access to deprecated permissions, including friend  
17 sharing.

18 And -- and now we've established that one  
19 of the ways that partners obtained access to  
20 previously publicly available permissions was 02:52:45  
21 through private APIs, right?

22 A. No. The way that the developers'  
23 applications would have retained access to  
24 previously publicly available permissions would  
25 have been to be on a whitelist. 02:53:03

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1 Q. Okay. And those -- and some of those 02:53:05  
2 partners obtained those permissions via private  
3 APIs, right?

4 A. Developers obtained permissions from  
5 users. Users get the ability to grant permissions 02:53:16  
6 to an app.

7 Q. Right.  
8 Well, frequently Facebook refers to  
9 permissions as the -- the access to certain types  
10 of information made available by Facebook to third 02:53:28  
11 parties, right?

12 A. The way permissions were --  
13 (Simultaneously speaking.)

14 Q. (By Mr. Loeser) The friend permissions.  
15 Yeah, I understand, but... 02:53:37

16 A. So friend permi- -- permissions are a  
17 concept in the Facebook developer platform. And  
18 the way that permissions work is that users grant  
19 those permissions to applications. Face- --  
20 Facebook does not grant those permissions to 02:53:48  
21 applications on a user basis. Users grant those  
22 permissions.

23 Q. Facebook makes available -- it's up to  
24 Facebook what APIs are available to third parties,  
25 right? 02:54:00

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1 Before the third party can ask for the 02:54:00  
2 permission from the user, Facebook decides what  
3 APIs are potentially available to the developer,  
4 right?

5 A. Facebook builds the -- the discussion in 02:54:11  
6 this matter is that Facebook developer platform is  
7 built by Facebook and, therefore, Facebook would  
8 decide how that platform functioned.

9 Q. Okay. And, again, I'm just trying to  
10 make sure the record is complete on the reasons why 02:54:23  
11 Facebook provided access to publicly deprecated  
12 permissions to partners.

13 You understand that, right?

14 A. I understand.

15 Q. And we're having a struggle -- sorry. 02:54:34  
16 Go ahead.

17 A. No, go.

18 Q. We're having a bit of a struggle over how  
19 to properly use the phrase "private APIs" in a  
20 sentence. And -- and I just want to make sure that 02:54:44  
21 with respect to private APIs, you have told me all  
22 the reasons why a private API would be made  
23 available to any Facebook partner in the  
24 transition.

25 A. I'm not -- the -- the question -- the -- 02:55:05

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1 my recollection of the question you asked me 02:55:08  
2 previously was around the reasons for apps to  
3 access the friend permissions after the friend  
4 permissions had been deprecated publicly.

5 And my understanding, having read many 02:55:23  
6 documents on this topic and spoken to the people  
7 involved at the time, and my own recollection, is  
8 that nobody has been able to explain to me any  
9 other reason why an app would have been given an  
10 extension to request a friend permissions. 02:55:46

11 Q. Just for a minute I'm -- I'm going to  
12 look at your notes. And, again, your -- your  
13 counsel provided us with the notes that you  
14 prepared and they've been marked as an exhibit.

15 Did you personally draft these notes? 02:56:08

16 A. Which exhibit are we referring to  
17 specifically?

18 Q. Exhibit 335.

19 A. Yeah, I personally drafted these notes.

20 Q. And one of the topics in your notes, on 02:56:30  
21 the first page you have "Evolution of platform  
22 timeline."

23 Do you see that?

24 A. I see that.

25 Q. And you refer to -- you have a bullet for 02:56:53

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1 "Granular permissions." 02:56:54

2 Do you see that?

3 A. I do see that.

4 Q. And so according to your notes, these

5 granular permissions started in 2010, correct? 02:57:01

6 A. That's my understanding of when the

7 granular permissions were launched.

8 Q. And so before granular permissions, did

9 app users -- or did apps get access to friend data

10 without needing to obtain authorization from the 02:57:17

11 user via the granular permissions?

12 A. The way the original authentication model

13 worked was that a user still had to make a decision

14 to grant an app access to their information. But

15 after doing so, the app had access to many of the 02:57:43

16 things that the Facebook user could have seen on

17 Facebook which may have included friends

18 information.

19 Q. Okay. And so what granular permissions

20 introduced was the requirement that the -- that the 02:57:58

21 app request express permission for the different

22 types of data that the app could access from the

23 user, including friend data, right?

24 A. Granular permissions was -- was seen as a

25 significant step forward in privacy by requiring 02:58:15

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1 developers to specify which subset of a user's 02:58:20  
2 Facebook information the user would grant to the  
3 application.

4 Q. Okay. And, again, so the record is  
5 clear, prior to the introduction of granular 02:58:33  
6 permissions, apps did not have to ask users for  
7 express permission to access friend data, correct?

8 A. Apps had to access -- ask users for  
9 express permission to access any of the user or  
10 their friends' information. 02:58:51

11 So I want to be super clear. That is  
12 always and always was a user opt-in step.

13 Q. However, prior to granular permissions,  
14 there was not a requirement for the app to ask  
15 expressly for permissions to access friend data, in 02:59:05  
16 particular, right?

17 A. There was not a permission model in place  
18 at that time that required an app developer to  
19 explicitly request access to friend data.

20 Q. If you look at the next bullet in your 02:59:24  
21 notes you state, "Facebook's [REDACTED]  
22 revealed that each [REDACTED] requested  
23 in a [REDACTED] resulted in a  
24 roughly [REDACTED]."

25 Can you -- did I read that correctly? 02:59:40

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1 A. I think you read that correctly, yeah. 02:59:42

2 Q. Okay. Can you explain what that means?

3 A. So in the transition to granular

4 permissions, developers were required to request

5 specific permissions from users when authorizing 03:00:00

6 their application. And developers had a number of

7 permissions to choose from or to select from.

8 And this quote is taken from a

9 document -- an internal document that -- I think --

10 potentially an external document. I don't recall 03:00:19

11 the source of this quote -- that directionally

12 means that the more permissions that an app

13 requested, the fewer people, on average, would

14 authorize the application in the granular data

15 permissions dialogue. 03:00:37

16 Q. And so -- so when users are asked

17 specifically by an app for permission to obtain

18 particular information, [REDACTED] of the time,

19 according to this source, the user said no?

20 A. No, that's not what it -- it means. 03:00:59

21 Best illustrated with an example for

22 clarity, I think.

23 Let's imagine an application called

24 Simon's Food app. And Simon's Food app would like

25 to access -- would like a user to use it. And as 03:01:19

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1 part of that, it would like access to some of that 03:01:25  
2 user's information.

3 In -- in this hypothetical example, if  
4 the app requested, let's say, two permissions from  
5 the user, then the conversion rate, i.e., the 03:01:42  
6 percentage of people who were asked for permission  
7 and granted it, might be 70 percent.

8 On average, if the app asked for three  
9 permissions instead of two, the conversion rate,  
10 again, on average, might be 67 percent. 03:01:59

11 Q. Okay. Understood.

12 And so are there -- is there variation,  
13 depending upon what specific permission is being  
14 requested?

15 A. I haven't prepared a company response to 03:02:18  
16 that.

17 From a personal recollection level, I can  
18 recall seeing analysis that analyzed conversion  
19 rate by permission, based on different types of  
20 permission. 03:02:37

21 Q. And have you seen an analysis of the  
22 conversion rate when the permission being requested  
23 is friend permission?

24 A. Again, on -- on a personal capacity, I --  
25 I don't recall the details of -- of what that 03:02:50

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1 analysis was. I wouldn't want to speculate what it 03:02:56  
2 is from my memory. Like that -- that would have  
3 been a document that I haven't seen for many years.

4 Q. And -- and does Facebook believe that,  
5 depending upon on how the permission is phrased, 03:03:07  
6 meaning what words are used, the conversion rate  
7 would be affected?

8 MR. BLUME: Objection. Scope.

9 THE DEPONENT: I haven't prepared a -- a  
10 company answer on that. And I -- I haven't 03:03:23  
11 reviewed documents that -- in preparation for this  
12 that would allow me -- allow me to answer that  
13 question on behalf of the company.

14 Again, on a -- on a personal level, I  
15 can't -- I can't recall analysis about the -- 03:03:39  
16 the -- the wording or the framing of the -- the  
17 permissions in the dialogue.

18 So I -- I don't -- I don't recall seeing  
19 analysis like that. It's possible it was done, but  
20 I -- I wouldn't want to confirm something I don't 03:03:58  
21 recall specifically.

22 Q. (By Mr. Loeser) Now, just the last  
23 question on your notes here.

24 If you turn to the next page, there's a  
25 heading "Wind-down timeline." 03:04:13

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1 And can you read the second bullet that 03:04:17

2 you have under that heading?

3 A. "There was an effort from Oct 2019 to

4 Jan 2020 to ensure all access was removed for

5 integrated partners and other 03:04:31

6 previously-whitelisted apps."

7 Q. And -- and what was the -- what prompted

8 this effort?

9 A. I actually think I might be -- I may have

10 been confused when I -- when I wrote this. 03:04:48

11 I -- I don't -- I -- I don't think there

12 was an effort from October 29 [sic] to January 2020

13 to ensure all access was removed for integration

14 partners and other previously whitelisted apps.

15 So I think I -- I was mistaken with this 03:05:03

16 bullet.

17 Q. And are you mistaken -- mistaken about

18 the time frame or you believe there never was an

19 effort to remove -- to remove access for

20 integration partners and previously whitelisted 03:05:18

21 apps?

22 A. There was an effort to ensure all access

23 was removed for integration partners and other

24 previously whitelisted apps. My understanding is

25 that process happened in 2018. 03:05:31

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1 Q. And when did that process complete? 03:05:35

2 A. The -- the -- I think -- my understanding

3 is that the -- the majority of that process --

4 the -- the bulk of that process completed in

5 June 2018. 03:05:51

6 Q. And was there some part of that process

7 that continued after that?

8 A. There's a developer blog post on July --

9 in July 2019, which refers to another few

10 applications that were later discovered and then 03:06:15

11 removed.

12 Q. So you educated yourself on this topic

13 through a publicly available developer's post; is

14 that what you're saying?

15 A. That's one of the ways I educated 03:06:30

16 yourself.

17 Q. Okay. And there were other ways as well,

18 right?

19 A. As we discussed, I have spoken to many of

20 the people involved at the time and -- and read 03:06:38

21 many internal documents on the matter.

22 MR. LOESER: Okay. And -- all right.

23 Well, we can move on. Thank you for that. And --

24 and start going through some more exhibits.

25 /////



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1 MR. LOESER: We're going to put up what 03:06:55  
2 has been previously marked as Exhibit 5. It's tab  
3 11 in our binder, Mr. Cross.

4 Q. (By Mr. Loeser) Let me know when you see  
5 the document. 03:07:42

6 A. Would you mind -- I can see the document,  
7 but it's -- it's very small.

8 Would you -- would you -- would you mind  
9 blowing it up.

10 (Discussion off the stenographic record.) 03:08:01

11 MR. LOESER: Okay.

12 THE DEPONENT: Thank you, Adele.

13 Q. (By Mr. Loeser) You should be looking at  
14 what's previously been marked as Exhibit 5, which  
15 is an email -- I'm not going to try and say this 03:08:14  
16 name -- let's just -- can you say that name of the  
17 author?

18 A. Constantin Koukouzelis.

19 Q. Okay. We'll call him CK. Not to be  
20 confused with -- with KP, if that's okay with you. 03:08:26

21 A. That's fine with me.

22 Q. Is that okay?

23 Okay. And this is an email from CK to  
24 Vishu Gupta and Doug Purdy, George Lee,  
25 Vladimir Fedorov, and the subject is "Re: platform 03:08:41

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1 3.0 2nd rev." 03:08:47

2 Do you see that?

3 A. I see that.

4 Q. And this is dated August 16th, 2013.

5 Do you see that? 03:08:59

6 A. I see that.

7 Q. And the attachment to this doc indicates

8 "Platform 3.0.docx."

9 Do you see that?

10 A. I see that. 03:09:11

11 Q. So CK is circulating a document that is a  
12 platform 3.0 -- it looks like Word file, right?

13 A. Docx typically refers to a Word file,  
14 yes.

15 MR. LOESER: Okay. We can put that 03:09:46

16 aside, and we're going to look at the attachment to  
17 that document which has previously been marked  
18 Exhibit 6.

19 MR. BLUME: Derek, are these marked as

20 exhibits to Mr. Cross's deposition numbers? 03:10:12

21 I'm -- I'm just not seeing them in the  
22 Veritext Exhibit Share.

23 MR. LOESER: These are -- we're just

24 numbering in sequence through the case. And so

25 this was the -- just Exhibit 6. It was in the 03:10:26

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1 Chang deposition, but I don't think that has 03:10:32

2 anything to do with how they're being marked.

3 MR. BLUME: Okay. And so it will go in

4 as the same exhibit number here.

5 MR. LOESER: Right. 03:10:42

6 Q. (By Mr. Loeser) So Mr. Cross, can you  
7 see Exhibit 6 yet?

8 A. Not yet.

9 Q. And while we're waiting for that to load,  
10 you're not communicating with anyone via text or 03:11:04  
11 email, or anything, during the course of this  
12 deposition, are you?

13 A. I am not.

14 Q. Okay. Thank you.

15 All right. So now do you see Exhibit 6? 03:11:17

16 A. I do.

17 Q. And this -- does this appear to be a Word  
18 document with the heading "Platform 3.0"?

19 A. It does.

20 Q. Okay. And I'll just state for the 03:11:26  
21 record, this is the document that was attached to  
22 the prior exhibit email that we identified.

23 And what is platform 3.0?

24 A. Platform 3.0 refers -- is one of the  
25 internal working titles for the set of changes that 03:11:47

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1 were ultimately announced on April the 30th, 2014. 03:11:50

2 Q. And can you read the third paragraph  
3 of -- of this -- this document for the record?

4 A. I can.

5 "After a lot of consideration we've" -- 03:12:07  
6 and before I do, I assume it will be marked in the  
7 record that I'm reading something rather than  
8 saying something.

9 Can I just get a nod from the court  
10 reporter? 03:12:21

11 THE COURT REPORTER: (Nod.)

12 Q. (By Mr. Loeser) Yes. It'll say "witness  
13 reading."

14 A. Thank you. Okay. Good. Thank you.

15 "After a lot of consideration we've 03:12:28  
16 decided to make some changes to the Facebook  
17 platform to act on this feedback. This is not a  
18 decision we've taken lightly and some of these  
19 changes will be painful for our developers in the  
20 short term. However, in the process of providing 03:12:40

21 users with the control they want" or need --

22 "/ need we are working towards a shared goal of

23 greater engagement and long term health of the

24 ecosystem that will mutually benefit both users and

25 our developers." 03:12:53

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1 Q. And -- and Mr. Cross, is that an accurate 03:12:56  
2 statement of the reasons for the introduction of  
3 platform 3.0?

4 A. This is a document, as I understand it,  
5 prepared nearly -- nearly nine months before the 03:13:09  
6 changes were ultimately announced. I don't think  
7 I -- it's appropriate to confirm that this is an  
8 accurate representation of the reasons.

9 Q. Okay. And was it Facebook's position  
10 and -- well, let me read one part of this and you 03:13:36  
11 tell me if this is, in fact, what Facebook's  
12 motivation was.

13 It says "However, in the process of  
14 providing users with the control they want / need  
15 we are working towards a shared goal of greater 03:13:52  
16 engagement and long term health of the ecosystem  
17 that will mutually benefit both users and our  
18 developers."

19 What is the reference to "providing users  
20 with the control they want"? 03:14:03

21 Do you know what that refers to and how  
22 the changes provided that control?

23 A. My understanding --

24 MR. BLUME: Where -- I'm sorry. Is  
25 that -- I'm not seeing that on my screen, what 03:14:14

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1       you're reading, Derek. 03:14:17

2               MR. LOESER: It was in the paragraph that  
3       Mr. Cross read. Third paragraph.

4               MR. BLUME: Okay. Thank you.

5               THE DEPONENT: My understanding is that 03:14:28

6       that refers to the changes that were made to the  
7       Facebook platform login dialogue as -- as of  
8       April 30th, 2015, for new apps that allowed users  
9       to decline to grant certain permissions that the  
10      app had requested from them. 03:14:51

11              Q. (By Mr. Loeser) Okay. Let's go to the  
12      next page of this memo. There's a heading  
13      "Breaking Changes."

14              And before getting into the substance of  
15      this, can you explain what breaking changes are? 03:15:11

16              A. Typically, breaking changes means when  
17      some behavior of the platform is changed that would  
18      require developers to write code to prevent broken  
19      experiences or integrations.

20              Q. And then underneath the "Breaking 03:15:36  
21      Changes" heading, you see a subheading, "Deprecate  
22      friend permissions."

23              Do you see that?

24              A. I do see that.

25              Q. And could you read the paragraph under 03:15:45

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1 that heading, for the record. 03:15:46

2 And I'll note so -- so the court reporter  
3 doesn't even have to, that you are going to now be  
4 reading a paragraph that is in this presentation  
5 prepared by Facebook. 03:15:55

6 A. Thank you.

7 "We are removing the ability for users to  
8 share data that belongs to their friends, who have  
9 not installed the app. Our philosophy is that  
10 users should be empowered to share their data with 03:16:04  
11 an app when they have expressed intent. Users  
12 should not be able to act as a proxy to access  
13 personal information about friends that have not  
14 expressed any intent in using the app. Apps can  
15 still power great, meaningful social experiences 03:16:19  
16 for their users and prompt a user to invite their  
17 friends to participate in the experience. Once a  
18 friend has installed the app, they can determine  
19 how much information they are willing to share at  
20 their discretion." 03:16:33

21 Q. Thank you.

22 So based upon this explanation, fair to  
23 say that the idea behind removing friend  
24 permissions was to make sure that users are  
25 "empowered to share their data with an app when 03:16:44

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1 they have expressed intent," right? 03:16:47

2 A. That was one of the -- that was seen at  
3 the time to be one of the -- the reasons for  
4 deprecating the friend permissions, yes.

5 Q. And Facebook decided that "users should 03:17:06  
6 not be able to act as a proxy to access personal  
7 information about friends that have not expressed  
8 any intent in using the app," right?

9 A. I think it's important to remind  
10 ourselves of the context of this document. 03:17:22

11 This document is being written by a  
12 product manager as a -- in my understanding, a  
13 potential narrative to explain some of the changes,  
14 which at that time were being proposed.

15 Q. And, sir, as we saw in this document, was 03:17:50  
16 it not the case that Facebook decided that users  
17 should not be able to act as a proxy to access  
18 personal information about friends that have not  
19 expressed an intent in using the app?

20 A. This is not Facebook's language. This is 03:18:05  
21 language written by a product manager on the team,  
22 who was involved in preparing and planning these  
23 changes.

24 Q. So are you saying that this product  
25 manager was intending to misrepresent the reason 03:18:21

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1 for the changes? 03:18:23

2 THE COURT REPORTER: Wait, Mr. Blume. I  
3 didn't hear you.

4 MR. BLUME: Sorry. Objection to form.

5 THE DEPONENT: I'm not suggesting that 03:18:33

6 this product manager was -- was misrepresenting  
7 Facebook's opinion, just that this represents a --  
8 the view, as held by that product's manager at the  
9 time, as they wrote this document.

10 Q. (By Mr. Loeser) And did Facebook have a 03:18:50  
11 different view?

12 MR. BLUME: Objection. Scope.

13 THE DEPONENT: It's hard for me to --  
14 yeah -- answer that, like does Facebook -- yeah, at  
15 the Facebook level. 03:19:05

16 My personal understanding is that this is  
17 broadly aligned with the direction as evidenced by  
18 the friend permissions being deprecated some nine  
19 months later.

20 Q. (By Mr. Loeser) Okay. And so the way to 03:19:20  
21 stop users from -- from providing access to their  
22 friend's personal information to apps the friends  
23 did not want to share was to deprecate friend  
24 permissions, right?

25 A. It was seen that deprecating the friend 03:19:34

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1 permissions would give users -- would -- would give 03:19:36  
2 people -- would make it less likely that users  
3 would share friends information -- friends content  
4 with a third-party application.

5 Q. Okay. If we can move down to the heading 03:20:00  
6 on the next page that says "Deprecate read\_stream  
7 permissions."

8 And to give you a break on your reading,  
9 I'll read this one myself and -- and note that I'm  
10 reading from this document. 03:20:21

11 Under the heading "Deprecate read\_stream  
12 permission," this document states "We will be  
13 deprecating the ability for developers to request  
14 access to a users news feed. This is an extremely

15 [REDACTED] 03:20:34

16 [REDACTED] User's are often unclear how this  
17 information is used and unaware of exactly how much  
18 information they are releasing to apps. There is  
19 no good way to make this functionality work with  
20 our enhanced focus on user trust and we will be 03:20:48  
21 removing it in the upcoming months."

22 Did I read that correctly?

23 A. Yeah, I think you read that correctly.

24 Q. And we talked a bit about read stream  
25 permission, but -- but -- so the record is clear, 03:20:59

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1 what -- what is read stream permission? 03:21:02

2 A. The read stream permission allowed --  
3 when a user granted it to an application, allowed  
4 an app to read that user's newsfeed.

5 Q. And this states that this is an 03:21:24  
6 "extremely [REDACTED]

7 [REDACTED]

8 Does Facebook agree with that statement?

9 MR. BLUME: Objection. Scope.

10 THE DEPONENT: I don't -- I don't feel 03:21:38  
11 qualified to -- to give Facebook's position on it.

12 My personal view is that it was an API  
13 that allowed apps -- apps to access a user's  
14 friends information, the posts and comments -- the  
15 posts on their newsfeed and -- and that was 03:21:59  
16 considered similarly to the friend permissions we  
17 discussed above.

18 Q. (By Mr. Loeser) And so in the transition  
19 to platform 3.0, the decision was made by Facebook  
20 to deprecate read permissions as well, right? 03:22:19

21 A. My understanding is that the read stream  
22 permission was not deprecated in version 2, and it  
23 was instead gated by app review.

24 Q. And that means that when an app wanted to  
25 access the read stream permission, they asked 03:22:43

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1 Facebook if they could have access to that 03:22:47  
2 permission?

3 A. The way app review worked was developers  
4 had to request permission from Facebook to request  
5 the permission from users. 03:22:59

6 Q. And how does that provide the user with  
7 information on how the read stream permission data  
8 is used?

9 MR. BLUME: Objection. Scope.

10 THE DEPONENT: Sorry. Yeah. I'm not 03:23:15  
11 sure how to -- how to answer that question.

12 How -- how does what provide the  
13 information to the user?

14 Q. (By Mr. Loeser) Well, that -- the  
15 gatekeeping. Because this states that a concern 03:23:22  
16 was users are often unclear how this information is  
17 used, and I'm wondering how the solution Facebook  
18 implemented satisfied that concern?

19 MR. BLUME: Objection. Beyond the scope.

20 THE DEPONENT: I think -- again, like 03:23:40  
21 what we're reading here is a product manager's view  
22 at a time. And Facebook's ultimate decision was  
23 that the read stream would remain available behind  
24 app review and the experience of granting read  
25 stream in an application would remain unchanged. 03:24:03

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1 Q. (By Mr. Loeser) Okay. So when this 03:24:06  
2 developer says "There is no good way to make this  
3 functionality work with our enhanced focus on user  
4 trust," Facebook decided to, nonetheless, continue  
5 to provide read stream permission, but with a -- 03:24:16  
6 with a gatekeeper added?

7 MR. BLUME: Objection. Form. And scope.

8 THE DEPONENT: Yeah. Not with a -- a  
9 gatekeeper, if we're referring to the specific  
10 internal tool. 03:24:34

11 I got to go back to what my -- my  
12 understanding of what was ultimately launched in  
13 April 2014, is that permission remained technically  
14 publicly available but was gated behind app review.

15 That's -- that's -- that's my 03:24:55  
16 understanding from -- as what happened.

17 In a personal capacity, my understanding  
18 is that -- actually, I -- I don't want to  
19 speculate. Because like I -- I'm not -- I -- yeah,  
20 I don't want to speculate as to exactly how that 03:25:12  
21 permission was subsequently granted to  
22 applications.

23 Q. (By Mr. Loeser) Okay. So even though  
24 the developer that wrote this memo concluded "There  
25 is no good way to make this functionality work with 03:25:26

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1 our enhanced focus on user trust," Facebook made 03:25:29  
2 the decision to continue to allow use by the  
3 developers of read stream permission, correct?

4 A. No. First of all, it's a product manager  
5 writing this, not -- not a developer. It's 03:25:44  
6 important to clarify.

7 And my -- my point is that the -- the  
8 permission remained publicly available as it was  
9 documented on the developer website in version 2,  
10 but only approved applications could request that 03:25:58  
11 permission from users.

12 Q. And the product manager that wrote this  
13 memo, according to the cover email, is CK, right?

14 A. Constantin Koukouzelis, yes. CK.

15 Q. And is Constantin -- sorry. 03:26:20

16 Is Constantin still employed by Facebook?

17 A. I do not know if Constantin is still  
18 employed by Facebook.

19 MR. LOESER: Okay. We can go to the next  
20 exhibit, which has previously been marked 03:26:44  
21 Exhibit 7.

22 THE DEPONENT: Actually, I want -- while  
23 we're there, I do want to add something.

24 My understanding is that the read stream  
25 permission was then deprecated in a subsequent 03:27:05

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1 version of the Graph API after version 2. 03:27:10

2 Q. (By Mr. Loeser) And -- and when did that  
3 occur, Mr. Cross?

4 A. I don't have the date at hand. But it  
5 would have been publicly documented on the Facebook 03:27:26  
6 developer website.

7 Q. And is that something that just came to  
8 your mind, or did you -- did you just read  
9 something?

10 How did you recall that? 03:27:35

11 A. I recalled it as we were talking. You  
12 didn't ask me specifically about what happened next  
13 with read stream. So I didn't consider it in my  
14 answers at the time.

15 But on balance, I think important to note 03:27:51  
16 that that permission was removed very soon after  
17 the launch of API version 2.

18 Q. And -- and why did Facebook remove that  
19 permission?

20 A. My understanding is that very few apps, 03:28:09  
21 if any, had met the criteria to be granted it.

22 Q. And -- and why would that be?

23 MR. BLUME: Objection. Scope.

24 THE DEPONENT: I can't specify exactly  
25 why no applications met the criteria. 03:28:33

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1 Q. (By Mr. Loeser) And Mr. Cross, didn't 03:28:45  
2 user posts and user photos provide similar  
3 information as read stream?  
4 A. No.  
5 Q. And why not? 03:29:00  
6 MR. BLUME: Objection. Scope.  
7 THE DEPONENT: Why not or how not?  
8 Sorry, Rob, go -- I didn't hear your  
9 objection.  
10 MR. BLUME: Scope objection. 03:29:11  
11 Q. (By Mr. Loeser) Yeah. How -- how not is  
12 a better question.  
13 Thank you for posing it.  
14 A. The user -- I think the -- the two ones  
15 you gave were user photos and user likes; is that 03:29:22  
16 right?  
17 Q. User posts.  
18 A. User posts.  
19 User posts and user likes allowed an app,  
20 with permission, to access the authenticating 03:29:30  
21 user's likes and their posts.  
22 Read stream allowed an application, if  
23 granted, to access the authenticating user's  
24 newsfeed, which is typically made up of posts,  
25 videos, photos, et cetera, made by that user's 03:29:52

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1 friends or pages they have liked. 03:29:58

2 Q. Okay. So back to our exhibit,  
3 Exhibit 7 -- previously marked Exhibit 7.

4 Do you see that in front of you?

5 A. I do. 03:30:12

6 Q. And for the record, this is an email from  
7 KP to Ime Archibong, Jackie Chang, with cc to  
8 Chris Daniels and to yourself.

9 "Subject: Re: T0/Special Cases for P3  
10 consideration," and attachment is noted, "All apps 03:30:30  
11 with friend permissions.xlsx."

12 Do you see that?

13 A. I do see that.

14 Q. This is a string that goes on for a  
15 couple of pages. 03:30:43

16 And why don't you take a minute just  
17 to -- to review it. I do have some questions that  
18 walk through the string. So it's worth having you  
19 take a look for context.

20 A. Yeah, of course. 03:30:56

21 Would you mind popping it into the  
22 Veritext system so I can scroll on my own?  
23 Otherwise we can do it on the Zoom. It just made  
24 be more efficient.

25 Q. It -- it should be there in the folder. 03:31:13

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1           A.    I'm looking at the marked exclamation --           03:31:14  
2    bang bang -- marked exhibits folder, which is, I  
3    think, where I'm supposed to be. I don't see the  
4    exhibit there.

5                    Maybe I'm supposed to be somewhere else?           03:31:24

6           Q.    Yeah. Is there a Day 2 folder that  
7    you're looking at?

8           A.    I don't see a Day 2 folder.

9                    MR. LOESER: Why don't we go off the  
10   record for a second.           03:31:33

11                   THE VIDEOGRAPHER: Okay. We're off the  
12   record. It's 3:31 p.m.

13                   (Recess taken.)

14                   THE VIDEOGRAPHER: We're back on the  
15   record. It's 3:46 p.m.           03:46:21

16           Q.    (By Mr. Loeser) Mr. Cross, did you have  
17   a chance to look through the email string that is  
18   identified as Exhibit 7?

19           A.    I didn't look through it, no.

20                   Let me -- let me do it now.           03:46:39

21                   I have it in the document now.

22           Q.    Okay. And just to maybe orient you, the  
23   string starts with an email from Jackie Chang on  
24   August 21st, 2013, at the end of the string.

25           A.    Okay. I've scanned through the document.           03:47:31

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1 Q. Okay. And so if you go back to the first 03:47:33  
2 page of the document, there's a number of people  
3 identified here. One is KP, and we've talked a bit  
4 about him.

5 But -- but what his -- what was his 03:47:46  
6 position, if you know, at this time at Facebook?

7 A. I wouldn't want to give like a perfectly  
8 authoritative answer.

9 My understanding is he was a strategic  
10 partner manager. 03:47:59

11 Q. Okay. And what -- and what about  
12 Ime Archibong?

13 A. Again, I don't want to be -- don't have  
14 an authoritative answer to his job title at the  
15 time. But my understanding is he was the manager 03:48:09  
16 of the strategic partnerships team.

17 Q. Okay. And Jackie Chang?

18 A. Similarly, I'm sure I have the  
19 authoritative answer, but my understanding is she  
20 was a strategic partner manager on the strategic -- 03:48:26  
21 on the platform partnerships team.

22 Q. And Chris Daniels?

23 A. Chris Daniels, again, don't want to give  
24 an authoritative answer.

25 My recollection, though, is that he was 03:48:40

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1 the head of business development. 03:48:41

2 Q. Okay. So now if we go to the -- the  
3 beginning of the string, if you look at the email  
4 that Jackie Chang wrote to Ime and Chris.

5 Do you see that towards the bottom of the 03:48:58  
6 string?

7 A. I do.

8 Q. And the -- the subject line isn't evident  
9 on that. But if you go up to the email above that  
10 from Ime, the subject is "Re: T0/Special Cases for 03:49:12  
11 P3 consideration."

12 What is -- do you know what T0 refers to  
13 here?

14 A. T0 refers to some partner classification  
15 that -- that seems to have been in use at the time. 03:49:29

16 Q. Okay. And having looked through this  
17 email, this is a discussion of the changes to the  
18 Facebook platform that would deprecate certain  
19 APIs, including friend permissions; is that right?

20 MR. DAVIS: Objection. Form. 03:49:53

21 THE DEPONENT: My understanding is this  
22 is an email thread discussing potential impact of  
23 the -- several changes to the API that were being  
24 considered at the -- at the time of this email  
25 being written. 03:50:12

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1 Q. (By Mr. Loeser) Okay. And looking at 03:50:13  
2 the Jackie Chang's message, at the beginning of  
3 this thread, she states "Working with KP to further  
4 synthesize P3 impact by breaking out T0 partners  
5 with non-standard agreements and specific 03:50:26  
6 categories of impact that we should address. KP is  
7 working on the pulling the same analysis of the  
8 friend data, but we're also working in parallel to  
9 parse out key partnerships/scenarios that we should  
10 be solving for." 03:50:38

11 Do you see that?

12 A. I see that.

13 Q. So what Jackie Chang is sorting out here  
14 is, among other things, which partners would lose  
15 access to friend permissions and which ones would 03:50:50  
16 not, right?

17 A. Jackie Chang is not making any decisions  
18 in this email. What you see here is a conversation  
19 between a number of people on the partnerships team  
20 attempting to react to a set of potential changes 03:51:09  
21 and how they might impact the partner ecosystem.

22 Q. Okay. And Jackie Chang is -- is helping  
23 to develop a format for how to decide which  
24 partners would have access to friend data, for  
25 example, and which ones would not, right? 03:51:28

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1 MR. DAVIS: Objection. Form. 03:51:36

2 THE DEPONENT: This is a group of people

3 attempting to put together their -- their best

4 guess at a framework. But there's nothing that

5 indicates that this was what was ultimately 03:51:49

6 implemented.

7 Q. (By Mr. Loeser) Okay. And -- by the

8 way, if you -- in this document, did you see that

9 link there, https, and then there's a long URL?

10 A. I do. 03:52:06

11 Q. Okay. How -- how would that work? If

12 someone sent you this email at Facebook, is -- is

13 that -- if there's a link in a document, it would

14 be something you could click on and you'd then see

15 the document? 03:52:18

16 A. My understanding is that this is a --

17 some form of online document system, yes.

18 Q. So in -- in Ms. Chang's email to Ime and

19 Chris, she provides a -- some recommendations for

20 how to bucket different partners in this analysis; 03:52:41

21 is that right?

22 A. It's hard to confirm what she -- what

23 she's doing here without seeing the original

24 document.

25 She's referring to -- to tabs, for sure. 03:53:00

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1 But hard to know what -- what was on those tabs and 03:53:03  
2 how that relates to what's in the email.

3 Q. So to fully understand this document, you  
4 would need the document that is hyperlinked in this  
5 email; is that what you're saying? 03:53:14

6 MR. DAVIS: Object to the form.

7 THE DEPONENT: There's references in the  
8 email to information in -- in -- in a document,  
9 which I don't have the ability to see as of now.

10 Q. (By Mr. Loeser) And would it help you 03:53:31  
11 understand the context of this email, if you had  
12 the ability to see that document?

13 MR. DAVIS: Object to the form.

14 THE DEPONENT: Potentially --  
15 potentially. It would depend on the contents of -- 03:53:42  
16 of the -- the document. But it also depends on  
17 the -- the question you're asking.

18 Q. (By Mr. Loeser) And do you recall  
19 Ms. Chang being involved in this process of coming  
20 up with a format to bucket different groups of 03:53:59  
21 partners?

22 A. Jackie Chang was on the partnerships  
23 team, as was I. And I, yes, recall that a number  
24 of people were involved in attempting to assess the  
25 proposed changes. 03:54:18

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1 Q. And if you go to the first heading in -- 03:54:21  
2 in her email, under the hyperlink, it says "T0  
3 Tab."

4 And you're saying you don't recall what  
5 category of partners would fall under the T0 tab? 03:54:34

6 A. I don't recall what category of partners  
7 would fall under -- under T0.

8 Q. Okay. Now, it looks like that under this  
9 category, T0, there are three different  
10 considerations that she -- that Jackie Chang 03:54:56  
11 identifies. The first is [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 Can you explain what that means?

15 A. I would be speculating as to -- as to 03:55:09  
16 exactly what that meant. So hard -- hard to --  
17 hard to know.

18 By "[REDACTED]," I

19 understand that to mean [REDACTED]

20 [REDACTED] 03:55:27

21 Q. And then the next bullet is "Existing  
22 integrations impacted."

23 How did the proposed changes to the  
24 platform impact existing integrations?

25 A. Integrations would have been impacted by 03:55:48

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1 the proposed changes in a number of different ways, 03:55:49  
2 depending on the precise purpose and design of the  
3 integration.

4 Q. Okay. So it appears that when coming up  
5 with this format, Facebook recognized that there 03:56:00  
6 were existing integrations and they could be  
7 impacted by the changes to the platform; is that a  
8 fair read of that bullet?

9 MR. DAVIS: Object to the form.

10 THE DEPONENT: The -- there was 03:56:13  
11 expectation at the time that the proposed changes  
12 would impact some existing integrations.

13 Q. (By Mr. Loeser) And then the next bullet  
14 is "Future integrations in planning."

15 That would refer to integrations that had 03:56:30  
16 not yet happened, but that Facebook was perhaps  
17 considering doing in the future?

18 A. I don't want to speculate as to exactly  
19 what Jackie meant. Maybe -- maybe -- maybe ask  
20 her. But -- so, yeah, I think maybe ask her. 03:56:46

21 Q. Okay. She'd probably be the best person  
22 to ask about what she wrote in an email?

23 A. I think she'd be the best person to ask  
24 about what she wrote in an email.

25 Q. If you look at the next -- next heading, 03:57:02

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1 it's "Risk Assessment Tab." And the first item on 03:57:04  
2 that list is [REDACTED] Potential partners/cases  
3 that may cause [REDACTED]

4 And can you tell me, from Facebook's  
5 perspective, what this refers to in the context of 03:57:17  
6 a discussion of the introduction of platform 3?

7 MR. DAVIS: Object to the form.

8 THE DEPONENT: It's hard to answer that  
9 from Facebook's perspective. I can answer it from  
10 a personal perspective. 03:57:37

11 My understanding of that is that there  
12 may have been a number of companies, developers  
13 that, when impacted by these changes would --  
14 which --

15 (Brief interruption.) 03:57:55

16 THE DEPONENT: -- potentially be publicly  
17 vocal about the impact on their integration.

18 Q. (By Mr. Loeser) Okay. And then let's  
19 look at the next bullet.

20 It says [REDACTED] 03:58:09

21 [REDACTED]

22 [REDACTED] to fb. Should [REDACTED]

23 [REDACTED] to

24 fb."

25 Did I read that correctly? 03:58:24

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1 A. I think you read that correctly, yeah. 03:58:25

2 Q. And so based on this, it appears that [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED] to Facebook, correct?

7 MR. DAVIS: Objection. Form. And scope.

8 THE DEPONENT: I wouldn't say that's

9 correct. This is a document containing the

10 opinions and ideas of a specific partner manager 03:59:01

11 around nine months before the -- the changes

12 were -- were introduced. This doesn't, I think,

13 reflect on ultimately how decisions were made.

14 Q. (By Mr. Loeser) What -- what is -- what

15 is strategic value? 03:59:19

16 What is meant by that?

17 A. I don't think I can answer what -- what

18 Jackie meant by strategic value in -- in her email.

19 I think that would be a question for her.

20 Q. And -- and what does Facebook mean by 03:59:32

21 strategic value?

22 A. I think strategic value could be

23 construed to mean many different things. I don't

24 think this is specific -- Facebook does not have a

25 specific definition of what strategic value means. 03:59:46

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1 Q. So Ms. Chang writes "Should [REDACTED] [REDACTED]  
[REDACTED]  
3 to fb."

4 And so can you tell me, from Facebook's  
5 perspective, what does it mean for a use case to be 03:59:59  
6 of strategic value to Facebook?

7 MR. DAVIS: Objection. Form. And scope.

8 THE DEPONENT: I can't give a -- a  
9 company answer to -- to -- to that question.

10 As -- as I testified earlier, I think 04:00:10  
11 there's a wide range of things that may be or could  
12 be considered strategic value.

13 Q. (By Mr. Loeser) Okay. So what are some  
14 of the things that may make sense in -- in the  
15 context of this email string? 04:00:21

16 MR. DAVIS: Objection. Form. And scope.

17 THE DEPONENT: I -- I can't answer on  
18 behalf of the company relative -- relative to what  
19 a partner manager was writing in an email nine  
20 years ago. So I think it's hard to answer that 04:00:38  
21 question.

22 Q. (By Mr. Loeser) So Facebook does not  
23 have an understanding of what it means for a  
24 partner to have strategic value to Facebook?

25 MR. DAVIS: Objection. Form. And scope. 04:00:50

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1 THE DEPONENT: There's not a standard 04:00:53  
2 company definition for what construes strategic  
3 value.

4 Q. (By Mr. Loeser) And -- and you're not  
5 prepared to testify as Facebook's -- as Facebook's 04:01:00  
6 representative or designee to testify about what  
7 strategic value means to Facebook in the context of  
8 its partners?

9 MR. DAVIS: Objection. Form.

10 THE DEPONENT: I could give some 04:01:19  
11 examples, per se, that might be considered  
12 valuable. But I can't give you, as you're asking,  
13 some kind of universal definition of what strategic  
14 value is to -- to Facebook.

15 Q. (By Mr. Loeser) What are the examples 04:01:37  
16 that you're thinking about?

17 A. So one example might be a mobile device  
18 integration to enable a Facebook-branded  
19 application to exist on a mobile operating system.

20 Q. Are there other examples? 04:01:59

21 A. There are probably other examples. I  
22 don't have any in my head immediately to mind.

23 Q. So you're not prepared to testify, on  
24 behalf of Facebook, as to other examples of what  
25 strategic value means to Facebook in this context? 04:02:21

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1 MR. DAVIS: Objection. Form. And scope. 04:02:24

2 THE DEPONENT: Well, I mean, be prepared

3 to testify, I -- you know, I think I could give

4 some more examples -- another example if I had a

5 bit more time to think of one. 04:02:39

6 Q. (By Mr. Loeser) What -- what does it

7 mean to drive value to Facebook -- for a partner to

8 drive value to Facebook?

9 MR. DAVIS: Objection. Form. And scope.

10 THE DEPONENT: In the context of -- can 04:02:51

11 you help me understand the context in which you're

12 asking.

13 Q. (By Mr. Loeser) Sure.

14 In the context of Jackie Chang's proposed

15 format for how to decide which partners should 04:02:59

16 receive continued access to friend permissions.

17 MR. DAVIS: Same objections.

18 THE DEPONENT: Yeah. I think drive value

19 to Facebook -- I mean, I think if you want to

20 understand what she meant by that phrase in an 04:03:12

21 email, you should ask Jackie.

22 Q. (By Mr. Loeser) But Facebook doesn't

23 have an answer to that question?

24 MR. DAVIS: Objection. Form. Scope.

25 THE DEPONENT: As I've said, there's a 04:03:28

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1 number of different ways which might be considered 04:03:29

2 drive -- drive value in this -- in this context.

3 Q. (By Mr. Loeser) If you look at the next

4 bullet in Ms. Chang's email, she writes

5 [REDACTED] [REDACTED] 04:03:52

6 [REDACTED]

7 [REDACTED] but may need some

8 [REDACTED]

9 Do you understand what she's referring to

10 here? 04:04:08

11 A. I don't understand what she's -- well, I

12 don't understand -- I can't be sure what she's

13 referring to here.

14 Q. What would it mean for a [REDACTED]

15 [REDACTED] to 04:04:23

16 Facebook?

17 MR. DAVIS: Objection. Form. Scope.

18 THE DEPONENT: So hard to give a company

19 answer to that question.

20 On a personal level, one example that 04:04:34

21 might come to mind is where a user might be able to

22 browse their newsfeed in another -- on another

23 platform or -- or app in another application,

24 which -- which meant the user would be browsing

25 their newsfeed in a non-Facebook app. 04:05:05

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1 Q. (By Mr. Loeser) And that would be 04:05:10  
2 competitive because that would then cause people to  
3 use that other app instead of Facebook, or that  
4 other platform instead of Facebook?

5 A. It might allow a user to browse their 04:05:25  
6 newsfeed in -- in an app that wasn't provided by  
7 Facebook.

8 Q. Now, let's turn to the beginning of the  
9 email string and look at the email from KP.

10 And it looks like that -- that the first 04:05:42  
11 thing he does is he adds you to this conversation;  
12 is that right?

13 A. It looks like he added me to the  
14 conversation, yes.

15 Q. That's what the "+ Simon" means at the 04:05:52  
16 top of this email?

17 A. That would be my interpretation, yes.

18 Q. Okay. So if we look at the second  
19 paragraph of KP's email, he writes, "A little  
20 update from my end, and how I think we should tie 04:06:03  
21 this to what Jackie has put together. Simon  
22 managed to pull a list of [REDACTED] apps that request  
23 and make use of the friend\_permissions. You can  
24 see all those apps in the attached. The most  
25 interesting data points having reviewed the top 250 04:06:23

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1 apps are the following (I took the liberty to make 04:06:25  
2 a recommendation as well by the way - the numbers  
3 in the brackets are the percentage of the apps  
4 reviewed under this category)."

5 Do you see that? 04:06:38

6 A. I do see that.

7 Q. And so KP refers to a list that you put  
8 together that had a full list of all the "apps that  
9 request and make use of the friends\_permissions";  
10 is that right? 04:06:59

11 A. I'm not sure it is a full list. It's a  
12 list of [REDACTED]-plus apps as -- well, as per -- as per  
13 the copy here. Again, I don't see the -- the  
14 document attached.

15 Q. Okay. And so -- and 40K apps mean 04:07:14  
16 40,000 -- more than 40,000 apps that allowed access  
17 to friend permissions?

18 A. Well, this mean 40,000 applications that  
19 were in some way requesting friend permissions from  
20 users. 04:07:32

21 Q. And attached to this document is a  
22 spreadsheet that -- that, based on this email,  
23 appears to be the list that you put together,  
24 correct?

25 A. That would make sense, yes. 04:07:44

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1 Q. And do you recall how you put together 04:07:46  
2 that list?

3 A. I -- answering in a -- again, on -- on a  
4 personal recollection here, I would have used one  
5 of Facebook's internal data analysis tools to pull 04:07:57  
6 this list together.

7 Q. Okay. Which tool would you have used?

8 A. My recollection is, I would have used  
9 HiPal.

10 Q. And is that a tool that could still be 04:08:16  
11 used to identify any app that had access to friend  
12 permissions?

13 MR. DAVIS: Objection. Form.

14 THE DEPONENT: I don't know. I don't  
15 think HiPal as a -- as a -- as a tool exists 04:08:30  
16 anymore. And I don't know what information it  
17 would grant access to today.

18 Q. (By Mr. Loeser) Let's -- I'm sorry. I  
19 didn't mean to interrupt you.

20 Let's work down KP's email a little bit 04:08:44  
21 and go to the -- the -- the No. 3 on here. And  
22 this -- am I reading this correctly, that -- that  
23 KP went through the list and reviewed the top 250  
24 apps and -- do you know what he means by the "top  
25 250 apps"? 04:09:08

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1 MR. DAVIS: Objection. Form. 04:09:10

2 THE DEPONENT: I do not know what he

3 means by the "top 250 apps."

4 Q. (By Mr. Loeser) And nonetheless, he

5 breaks the apps into -- it looks like nine 04:09:19

6 different categories; is that right?

7 A. I see nine bullets on this email, yeah.

8 Q. And the third category is "Strategic."

9 Do you see that?

10 A. I see that. 04:09:37

11 Q. And he writes "from [REDACTED] -- which I

12 assume is [REDACTED] is that right?

13 A. I would assume that would be [REDACTED]

14 Q. So from [REDACTED] to

15 [REDACTED] and the likes. Some of them 04:09:50

16 should obvious not have access such as [REDACTED]

17 [REDACTED] etc. In particular for Strategic

18 partners we should use the framework developed by

19 Jackie. RECOMMENDATION: User Jackie's framework."

20 Do you see that? 04:10:11

21 A. I do see that.

22 Q. So does this suggest to you that KP

23 believed that the framework for sorting partners

24 into buckets or deciding whether they have

25 continued access to friend permissions, was the one 04:10:20

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1 that had been proposed by Jackie Chang? 04:10:22

2 MR. DAVIS: Objection. Form.

3 THE DEPONENT: I think the context,

4 again, of this email is important. This is a -- a

5 team of people, nine months before changes were 04:10:32

6 announced, attempting to find some way to structure

7 their thinking.

8 In this email, he's referring to,

9 you know, Jackie's framework. But it's not clear

10 to me what Jackie's framework is. And it's also 04:10:52

11 not clear whether or not any of this was ultimately

12 used.

13 Q. (By Mr. Loeser) Okay. Well, let's go up

14 to the top of KP's email.

15 He says "Thanks a lot, Jackie. This is 04:11:05

16 great - I have included the additional info for the

17 strategic partners in the attached spreadsheet as

18 well (for completeness)."

19 Do you see that?

20 A. I do see that. 04:11:19

21 Q. So he received a format from Jackie,

22 right?

23 MR. DAVIS: Objection. Form.

24 THE DEPONENT: I mean, all I have to go

25 on to answer your questions is what -- what's on 04:11:28

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1 the screen here. 04:11:30

2 I think Jackie or KP need to answer the  
3 specifics.

4 Q. (By Mr. Loeser) And you can confirm, on  
5 behalf of Facebook, that in this email KP 04:11:41  
6 recommended using Jackie's framework for the  
7 category described in KP's email as strategic,  
8 right?

9 MR. DAVIS: Objection. Form.

10 THE DEPONENT: I can confirm this email 04:11:54  
11 exists. Sorry. I can confirm that this document  
12 exist.

13 But like I can't confirm anything about  
14 the precise nature of a framework or if that was  
15 used in any way. 04:12:10

16 Q. (By Mr. Loeser) Right.  
17 And I asked you a slightly different  
18 question.

19 It was, can you confirm that KP  
20 recommended the use of Jackie's framework? 04:12:17

21 MR. DAVIS: Objection. Form.

22 THE DEPONENT: Again, all I have to go on  
23 is what's on the page here. So I would be  
24 confirming -- confirming what we all can read with  
25 our own eyes. I can't confirm, on behalf of 04:12:33

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1 Facebook, anything more than that. 04:12:37

2 Q. (By Mr. Loeser) And so if Facebook  
3 wanted to figure out if Jackie's framework was  
4 used, what would Facebook do to identify the answer  
5 to that? 04:12:45

6 MR. DAVIS: Objection. Form.

7 THE DEPONENT: You want me to stand by  
8 what you mean by Jackie's framework was used.

9 Q. (By Mr. Loeser) Well, is there something  
10 confusing about that statement? 04:12:55

11 A. Yes.

12 Q. Okay. Well, let's break it down.

13 There's a framework discussed in this  
14 email, right?

15 A. There's the -- there's a framework 04:13:11  
16 discussed. But it's not clear to me exactly what  
17 that framework is.

18 Q. Okay. But there is a framework that's  
19 indicated in Jackie's email to Ime Archibong,  
20 right? 04:13:27

21 MS. DAVIS: Objection. Form.

22 THE DEPONENT: She doesn't make a  
23 reference to a framework.

24 Q. (By Mr. Loeser) If you go back to the  
25 heading we were looking at, No. 3, KP refers to 04:13:52

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1 "Jackie's framework," right? 04:13:56

2 A. I can see the term here use -- "User  
3 Jackie's framework." I can read that on the page.

4 Q. Okay. And at the beginning of this  
5 string is a -- is a description of how to bucket 04:14:06  
6 different partners, based upon the types of  
7 agreement they had, the impact and the risk  
8 assessment; is that right?

9 MR. DAVIS: Objection. Form.

10 THE DEPONENT: As we've discussed, 04:14:28  
11 there's a set of bullets on this page and a link to  
12 a document. I'm not sure I construe that as a  
13 framework.

14 Q. (By Mr. Loeser) Okay. It appears that  
15 KP referred to it as a framework, right? 04:14:39

16 A. When he's referring to Jackie's  
17 framework, technically he could be referring to  
18 something else. He could be referring to this.

19 It's hard to know. This is an email  
20 thread from nine years ago. And if you want to 04:14:51  
21 know what these people meant, I would ask them.

22 Q. Well, why don't we look at the end of  
23 KP's email, and he writes, "As a general note, I  
24 think we need to carry on with this exercise to  
25 figure out [REDACTED] 04:15:19

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1 [REDACTED] that we [REDACTED] 04:15:21

2 [REDACTED] before we can make a decision [REDACTED]

3 [REDACTED] For both the [REDACTED]

4 [REDACTED], we can use Jackie's

5 framework to assess [REDACTED] for those partner 04:15:32

6 falling under the [REDACTED] and then make up a

7 decision based on the criteria outlined by Jackie

8 below."

9 Do you see that?

10 A. I read -- I see it on the page. 04:15:44

11 Q. So it seems pretty clear that KP is  
12 referring to the framework that Jackie presented  
13 below, right?

14 MR. DAVIS: Objection. Form.

15 THE DEPONENT: Again, Jackie doesn't 04:15:55

16 refer to anything about her work as a -- as a  
17 framework.

18 Q. (By Mr. Loeser) KP refers to her work as  
19 a framework; is that right?

20 A. KP refers to a framework. It's not 04:16:07

21 abundantly clear if he means Jackie's work as -- as  
22 evidenced below.

23 Q. Okay. So let's look again.

24 "We can use Jackie's framework to assess

25 KEEP/REMOVE for those partner falling under the 04:16:23

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1 Strategic tabs and then make up a decision based on 04:16:26  
2 the criteria outlined by Jackie below."

3 Do you see that?

4 A. I see that.

5 Q. And are there criteria outlined by Jackie 04:16:35  
6 below?

7 MR. DAVIS: Objection. Form.

8 THE DEPONENT: Again, like -- I can read  
9 an email. If you want to understand precisely what  
10 the people in it meant, I would speak to them. 04:16:50

11 Q. (By Mr. Loeser) Yeah.

12 I'm more interested in what Facebook  
13 understands, based upon the work of the employees  
14 tasked with trying to decide which partners would  
15 continue to have access to friends permissions and 04:17:02  
16 which would not.

17 So are you not prepared to testify about  
18 Facebook's understanding of how those partners were  
19 sorted?

20 MR. DAVIS: Objection. Form. And scope. 04:17:11

21 THE DEPONENT: I'm prepared to testify  
22 that there's a group of people in a partnerships  
23 team attempting to put together a way of  
24 understanding how these proposed -- the -- the  
25 changes proposed at the time might impact the 04:17:25

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1 partner ecosystem. 04:17:28

2 Q. (By Mr. Loeser) And so did -- did --

3 A. There's no --

4 Q. Sorry. Go ahead.

5 A. Sorry. Go on. 04:17:35

6 Q. Did Facebook use Jackie Chang's framework  
7 for deciding which strategic partners would have  
8 access to friend and newsfeed permissions?

9 A. No.

10 MR. DAVIS: Objection. Form. 04:17:49

11 THE DEPONENT: Sorry.

12 I don't recall -- again, hard -- hard to  
13 answer fully on behalf of the company here.

14 My understanding is that this was not  
15 used in any way to make decisions. 04:17:59

16 I think one of the things that's  
17 important to know here is that, again, this email  
18 is from August 2013, which is around, you know,  
19 nine or more months before the changes were  
20 announced. 04:18:19

21 At this time the -- the -- the changes  
22 that were proposed were somewhat different in how  
23 they were ultimately rolled out. Much, much  
24 changed between this time and April 30th, 2015.

25 Q. (By Mr. Loeser) Okay. Well, let's make 04:18:48

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1 | sure we understand what's going on here at this 04:18:49

3                    Would you consider this a planning stage  
4        for platform 3?

6 THE DEPONENT: Again, I don't know if the  
7 company has a view on that.

9 understanding of the conversations at the time is

10 that this is part of the preparation for 04:19:15

12 have on the developer ecosystem.

14 ultimately announced and before many of the

15 important details of how they would be implemented 04:19:41

17 Q. (By Mr. Loeser) Okay. And so Ms. Chang

```
19      sorting out which partners and apps would continue
```

21 |       that -- is that right?

23 THE DEPONENT: As I previously testified,

25 some categorization in it. She doesn't refer to 04:20:09

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1 that as a framework. KP refers to "a" framework. 04:20:12

2 It could be that he's talking about Jackie's work.

3 But to confirm that you'd need to speak  
4 to KP or Jackie.

5 Q. (By Mr. Loeser) Okay. And the -- and 04:20:25

6 the people that were involved in the development of  
7 the criteria used to sort partners for deciding who  
8 would have access to friend permissions were

9 Chris Daniels, Ime Archibong, KP, Jackie Chang and  
10 yourself? 04:20:43

11 MR. DAVIS: Objection. Form.

12 THE DEPONENT: This document represents

13 an email thread with some people on it having

14 that -- having a discussion about how to

15 potentially categorize apps that might be affected 04:20:55

16 by the deprecation.

17 Q. (By Mr. Loeser) And, sir, who made the

18 final decision on the framework for -- to be used

19 for determining which apps or partners would

20 continue to have access to deprecated permission, 04:21:09

21 such as friend sharing?

22 MR. DAVIS: Objection. Form.

23 THE DEPONENT: I'm not sure how to answer

24 that question. Yeah. I'm not sure how to answer

25 that question on behalf of the company. 04:21:25

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1 In a -- in a personal capacity I -- 04:21:30  
2 you know, this -- this -- I don't recall specific  
3 framework being used.

4 Q. (By Mr. Loeser) And my question was a  
5 little different. And it is in your capacity as 04:21:43  
6 Facebook's designee.

7 I would like to know who made the final  
8 decision on the framework to be used for  
9 determining which apps or partners would continue  
10 to have access to deprecated permissions? 04:21:58

11 MS. DAVIS: Objection --

12 Q. (By Mr. Loeser) I assume they're --  
13 well, let me ask it this way.

14 Was there a framework used by Facebook  
15 for determining which app -- apps and partners 04:22:03  
16 would continue having access to deprecated  
17 permission?

18 MR. DAVIS: Objection. Form.

19 THE DEPONENT: I don't -- I don't recall  
20 a specific framework being used to make those 04:22:14  
21 decisions.

22 Q. (By Mr. Loeser) So is it Facebook's  
23 testimony that the determination was ad hoc?

24 MR. DAVIS: Objection. Form.

25 THE DEPONENT: In the end, the -- there 04:22:29

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1       were -- the -- the way the decisions were made were       04:22:33  
2       a bunch of conversations between the partnerships  
3       team and the platform leadership team to determine  
4       what made sense.

5           Q.     (By Mr. Loeser)   Okay.   And based upon       04:22:47  
6       the string that we've gone through, the -- the  
7       recommendation from Jackie Chang and the  
8       recommendation from KP was to take into account the  
9       strategic value of the partner to Facebook when  
10      deciding whether to grant continued access to       04:23:10  
11      deprecated permissions; is that right?

12           MR. DAVIS:   Objection.   Form.

13           THE DEPONENT:   No.

14           Q.     (By Mr. Loeser)   You don't see that  
15      discussion of strategic value in the email string       04:23:22  
16      we just went through?

17           A.     I see the discussion in the email thread.  
18      But as I testified earlier, my understanding is  
19      that this is a group of people attempting to put  
20      together a way to think about the impact of these       04:23:41  
21      changes on the developer ecosystem.

22           The result of this work, nine months  
23      before the changes went into effect, were based on  
24      their first pass understanding of the proposed  
25      changes, many of which were different in form when       04:24:05

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1 ultimately implemented. 04:24:07

2 Q. And so is it Facebook's testimony that  
3 strategic value was not a consideration taken into  
4 account when deciding whether to provide continued  
5 access to deprecated permissions?

04:24:18

6 MR. DAVIS: Objection. Form.

7 THE DEPONENT: As we discussed  
8 previously, the -- from my discussions with all of  
9 the people involved -- well, many of the people  
10 involved at the time and reading other internal  
11 documents, is that a very, very small number of  
12 applications were ultimately granted an extension.

04:24:33

13 And there were, to my understanding, only  
14 two reasons. The -- I have heard as to the reasons  
15 why those extensions were granted. We've discussed  
16 them previously.

04:24:53

17 MR. LOESER: Okay. And I'm going to have  
18 the court reporter read back my question to you,  
19 and if you could just answer the question directly,  
20 please do.

04:25:06

21 MR. DAVIS: And my objection, please.

22 (Record read as follows:

23 "QUESTION: And so is it Facebook's  
24 testimony that strategic value was  
25 not a consideration taken into

04:24:12

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1 account when deciding whether to 04:24:15  
2 provide continued access to  
3 deprecated permissions?  
4 MR. DAVIS: Objection. Form.")  
5 THE DEPONENT: It's hard to answer. 04:25:36  
6 I'm -- I'm not sure I -- I can't answer a question  
7 with -- with -- can you please -- given the  
8 objection, could you ask the question in a way that  
9 doesn't generate an objection?  
10 Q. (By Mr. Loeser) Would that -- if I had a 04:25:51  
11 magic wand, but I don't.  
12 SPECIAL MASTER GARRIE: Actually --  
13 MR. LOESER: No, there's nothing --  
14 SPECIAL MASTER GARRIE: No. Actually,  
15 just answer the question. 04:25:58  
16 THE DEPONENT: Okay. Sorry.  
17 Could you ask the question again then.  
18 THE COURT REPORTER: Do you want me to  
19 read it back?  
20 MR. LOESER: Sure. Go ahead. 04:26:11  
21 Thank you.  
22 SPECIAL MASTER GARRIE: And -- and in  
23 your capacity as a 30(b)(6).  
24 Go ahead. Read the question.  
25 (Record read as follows: 04:26:43

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1 "QUESTION: And so is it Facebook's 04:27:09  
2 testimony that strategic value was  
3 not a consideration taken into  
4 account when deciding whether to  
5 provide continued access to 04:24:17  
6 deprecated permissions?")  
7 MR. DAVIS: Object to the form.  
8 SPECIAL MASTER GARRIE: Overruled. Ask  
9 the question again.  
10 (Record read as follows: 04:24:21  
11 "QUESTION: And so is it Facebook's  
12 testimony that strategic value was  
13 not a consideration taken into  
14 account when deciding whether to  
15 provide continued access to 04:24:17  
16 deprecated permissions?")  
17 THE DEPONENT: I don't -- how do I want  
18 to say this.  
19 I don't think I can answer -- can confirm  
20 the strategic value is not in any way taken into 04:27:19  
21 account. Strategic value has not been defined or  
22 determined specifically, as we discussed earlier.  
23 Q. (By Mr. Loeser) And how does Facebook  
24 define strategic value in the context of deciding  
25 whether to grant continued access to deprecated 04:27:39

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1 permissions to partners? 04:27:42

2 MR. DAVIS: Object to the form.

3 THE DEPONENT: I don't know how to define

4 strategic value in determining how to -- how these

5 decisions were made. 04:27:59

6 Q. (By Mr. Loeser) And when you say "I

7 don't know," you mean Facebook doesn't know?

8 A. To the best -- I -- I have spoken to a

9 number of people involved in -- in this initiative

10 and -- and read -- read documents. 04:28:22

11 And my understanding as to why extensions

12 to the deprecations were granted is because there

13 would be an impact on -- for the friend

14 permissions, an impact on the user experience if

15 there was no extension granted or where the partner 04:28:40

16 was making use of them for a -- a use case that

17 involved compliance or legal considerations.

18 Q. And those reasons you just mentioned did

19 not include strategic value to Facebook, right?

20 A. Again, I -- I don't -- there's no single 04:29:08

21 definition for what strategic value meant. I mean,

22 you're asking me a question that -- that's very

23 hard to answer.

24 I mean, if you could ask a more specific

25 question, maybe I'll be able to give you a better 04:29:22

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1 answer. 04:29:25

2 Q. Well, you just gave two reasons. Neither  
3 one of those is of strategic value to Facebook,  
4 right?

5 A. I'm not sure I agree. One of the 04:29:32

6 benefits of allowing user experiences not to be  
7 broken by the migration is that users don't have  
8 broken user experiences, and those developers have  
9 the time to wind down their integrations

10 gracefully, maintaining strong relationships with 04:29:54  
11 developers. That might be considered strategic  
12 value.

13 Q. And was that considered strategic value  
14 by Facebook in the context of deciding which apps  
15 would have access to deprecated permissions? 04:30:09

16 MR. DAVIS: Objection.

17 THE DEPONENT: Again, I don't -- I don't  
18 feel I have -- I don't feel that I can answer with  
19 a definition of what strategic value is on behalf  
20 of the company. As we discussed earlier, that 04:30:20

21 frame -- that framing could mean many things in  
22 many different contexts.

23 MR. LOESER: Okay. Well, let's move on  
24 to the next exhibit, which is Exhibit 11.

25 /////

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1 Q. (By Mr. Loeser) And Mr. Cross, you 04:31:00

2 should be looking at what's previously been marked

3 as Exhibit 11, which is an email from you to

4 Ime Archibong, Jackie Chang and KP, dated

5 September 3rd, 2013, "Subject: Re: P3.0 Rollout 04:31:07

6 Planning."

7 Do you see that?

8 A. I see that.

9 Q. In your email you state "Here's my draft

10 deck for review tomorrow. Yes, it's a little 04:31:20

11 longer than hoped, but I feel it needs to

12 standalone when passed around beyond Chris,

13 assuming he's OK with this strategy. Feedback

14 welcome, will try and incorporate ASAP."

15 Do you see that? 04:31:34

16 A. I see that.

17 Q. Okay. So this is an email that you sent

18 with a draft deck regarding the rollout of

19 platform 3; is that right?

20 A. That is correct, yes. 04:31:47

21 Q. Okay. And why don't we turn to the deck

22 itself, which has previously been marked

23 Exhibit 12.

24 /////

25 /////

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1 MR. DAVIS: And Mr. Loeser and 04:32:03  
2 Ms. Daniel, could I get these in Exhibit Share,  
3 please.  
4 MS. DANIEL: Yes, they're there.  
5 MR. LOESER: Yeah, they're there. 04:32:16  
6 You need to look in Day 1 folder because  
7 for some reason --  
8 SPECIAL MASTER GARRIE: Before we --  
9 yeah. Before we move forward, Counsel Davis,  
10 just -- can you confirm that you have access 04:32:29  
11 because that's pretty critical for you to do your  
12 job.  
13 MR. BLUME: Okay. I -- I have them now  
14 in the Day 1 folder.  
15 Apologies. Thank you. 04:32:40  
16 SPECIAL MASTER GARRIE: Don't apologize.  
17 You got to work.  
18 Q. (By Mr. Loeser) Okay. So we're -- we're  
19 going to bring up Exhibit 12, which is the -- the  
20 deck that you prepared, Mr. Cross. 04:32:47  
21 And if we look at the first page, it  
22 states "Platform 3.0, Planning, Preparation &  
23 Execution"; is that right?  
24 A. That's what I see.  
25 Q. And do you recall preparing this slide 04:33:04

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1 deck? 04:33:06

2 A. I don't recall preparing it. But I've  
3 seen it recently.

4 Q. And you saw it for your -- preparing for  
5 your testimony today? 04:33:15

6 A. That's correct.

7 Q. So on -- if you go to slide -- the second  
8 page, which I think is probably considered  
9 slide 1 of the deck, one of the headings is  
10 "Capabilities Cleanup." 04:33:34

11 Do you see that?

12 A. I see that.

13 Q. And it states [REDACTED]

14 [REDACTED] Who has what and why? GOAL: Cleaner,  
15 more equitable, more supportable Platform." 04:33:44

16 Do you see that?

17 A. I see that.

18 Q. And the first bullet below that says  
19 [REDACTED] is huge task, value unclear," right?

20 A. I see that. 04:33:58

21 Q. And why was it a huge task?

22 A. I think I need to answer this in a  
23 personal capacity, rather than Facebook. I don't  
24 think Facebook has a view on that.

25 In my personal capacity, my recollection 04:34:12

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1 is that there were what was seen at the time to be 04:34:16  
2 a relatively large number of [REDACTED]  
3 and going through each of them manually might take  
4 a significant amount of energy.

5 Q. And you state the value was unclear. 04:34:37

6 Why -- why did Facebook believe the value  
7 was unclear?

8 A. Well, I'm not sure Facebook has a view on  
9 that.

10 Again, from a personal capacity, when I 04:34:50  
11 was writing this, my -- my recollection is that the  
12 value of doing such an -- [REDACTED] -- wasn't  
13 necessarily obvious or understood.

14 Q. And did the audit occur?

15 MR. DAVIS: Objection. Form. 04:35:17

16 THE DEPONENT: Some work was done to  
17 improve the capability tool and remove some  
18 capabilities from apps that weren't using them.

19 Q. (By Mr. Loeser) Let's look at the next  
20 slide which has the header "P3.0 04:35:32  
21 Launches/Deprecations."

22 Do you see that?

23 A. Yes.

24 Q. And there's a list here, in the middle of  
25 the slide, "Public API Deprecations," and it states 04:35:42

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1 "i.e. Currently public APIs which will become 04:35:46  
2 whitelist only or deprecated entirely," right?

3 A. I see that.

4 Q. So in the planning phase for the rollout  
5 here, Facebook had identified that there would be 04:35:58  
6 APIs that were deprecated entirely, right?

7 A. At this time, the changes to the platform  
8 were in a proposed state. They -- well,  
9 ultimately -- was announced and launched changed  
10 significantly over time. And certainly between the 04:36:24  
11 time that this deck was created and the ultimate  
12 announcements.

13 Q. Okay. And my question was simpler  
14 really. I'm just -- I want to make sure that -- in  
15 the planning phase, Facebook identified that -- 04:36:39  
16 that some apps would become whitelist only or  
17 some -- some -- some APIs would become whitelist  
18 only and others would be deprecated entirely. That  
19 was the structure that Facebook came up with,  
20 right? 04:36:53

21 MR. DAVIS: Objection. Form.

22 THE DEPONENT: Again, in -- I don't think  
23 Facebook came up with that structure.

24 And, again, in personal capacity, my  
25 understanding at the time is that it was proposed 04:37:05

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1 proposals about APIs and permissions that -- that 04:38:23  
2 would be privatized or deprecated. At the time  
3 this deck was written, no decisions had been made.

4 Q. Okay. And when you say "privatized" or  
5 "deprecated," is that an expression you're using 04:38:36  
6 that's synonymous with whitelisted?

7 MR. DAVIS: Objection. Form.

8 THE DEPONENT: In -- when -- in this  
9 context, when I refer to "privatized," I'm  
10 referring to something that would be available only 04:38:49  
11 to apps that had been -- only to apps developers  
12 that had been whitelisted in some way.

13 Q. (By Mr. Loeser) And then this -- this  
14 table below the "Public API Deprecations" list --  
15 under the heading "Public API deprecations," it 04:39:10  
16 lists through a variety of permissions that, at  
17 this stage anyway, Facebook was intending to -- to  
18 deprecate; is that right?

19 MR. DAVIS: Objection. Form.

20 THE DEPONENT: This is a list of 04:39:25  
21 permissions and APIs that at the time were being  
22 considered for deprecation or privatization.

23 Q. (By Mr. Loeser) Okay. And so, for  
24 example, for friends\_star permissions, this also  
25 indicates the number of apps requesting these 04:39:39

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1 permissions per day, and it says 18,067. 04:39:41

2 Do you see that?

3 A. I do see that.

4 Q. And how was Facebook able to identify the  
5 number of apps requesting those permissions per 04:39:50  
6 day?

7 A. This analysis was -- was -- was pulled by  
8 me so I should answer that in a -- in a personal  
9 capacity.

10 My recollection is there was a mechanism 04:40:01  
11 to determine if a permission had been displayed to  
12 a user in the authentication in the GDP login  
13 dialogue. And my recollection is that's the  
14 information I was using to determine whether or not  
15 an app was actively requesting that permission from 04:40:19  
16 users.

17 Q. And when you say "GDP," is that -- what  
18 is that?

19 A. Sorry. Yeah. Good -- good  
20 clarification. 04:40:30

21 That's jargon. That's the -- what's  
22 otherwise known as the Facebook login dialogue.  
23 It's the log -- it's the dialogue that a user sees  
24 before -- when they grant permissions to  
25 applications. 04:40:43

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1 Q. And then the next column has the heading 04:40:44  
2 "User app-pair permission-set impressions/day."  
3 And for "friend\_\*permissions," it's [REDACTED]  
4 Explain what that column represents and  
5 how you were able to identify the number. 04:40:59  
6 A. Give me a few seconds to -- to read this  
7 and see if I can remember exactly how this was  
8 pulled together.  
9 Unlike the first column, I don't  
10 immediately recall how this was computed. 04:41:15  
11 So this refers to -- reading this has  
12 jogged my memory. Reading this refers to the  
13 number of distinct users for an application, across  
14 all of the applications that requested that -- that  
15 group of permissions from users on -- when the 04:41:55  
16 analysis was done.  
17 Q. Okay. And what was the tool that you  
18 used to determine that?  
19 A. I would have used the HiPal tool to query  
20 this data. 04:42:19  
21 Q. And if you wanted to find that  
22 information today at Facebook, what would you do?  
23 A. I would ask one of the engineers on the  
24 platform team if they could do the analysis or find  
25 someone who could do the analysis. 04:42:34

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1 Q. And who's the one that you think would be 04:42:36  
2 the most knowledgeable?

3 A. The engineer I would immediately go speak  
4 to is Steven Elia. But he would almost certainly  
5 direct me to someone more knowledgeable than him. 04:42:46

6 Q. Let's go to the next slide, which has the  
7 heading "Preparing for the Deprecations." And the  
8 first line under the heading writes "[REDACTED]" -- so  
9 "[REDACTED]" -- "apps are currently using  
10 to-be-deprecated features. Propose we review these 04:43:06  
11 apps and classify each as:"

12 Did I read that correctly?

13 A. You read that correctly.

14 Q. And so then you come up with a -- or you  
15 present here a classification of -- of the apps 04:43:17  
16 that are currently using to-be-deprecated features;  
17 is that right?

18 A. Yeah. Again, in a personal capacity,  
19 my -- my recollection is that I was proposing a  
20 potential way to -- to categorize the apps using 04:43:38  
21 to-be-deprecated features.

22 Q. Okay. And the first bullet is  
23 "Pre-enforce." And you write "use existing  
24 policies to revoke apps access (note: no appetite  
25 to do this at" the -- "at present).". 04:43:54

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1 Explain what you mean there. 04:43:57

2 A. Again, in a personal capacity, my  
3 recollection is that there was some discussion  
4 about whether or not there would be a way to make  
5 changes in advance of some form of public 04:44:18  
6 announcement. But I don't recall the specifics.

7 What I think is important to remember is  
8 that, again, this deck, as I understand it, from  
9 the time stamp -- the date stamp in the bottom left  
10 is, you know, eight months in advance of ultimately 04:44:33  
11 how the deprecations were announced.

12 And at the time, my recollection is that  
13 the ways in which those changes would be rolled out  
14 was very different to how it ultimately was rolled  
15 out. And at this point, therefore, some different 04:44:54  
16 options were being considered.

17 Q. Fair to say that the introduction of the  
18 new platform was an extremely important event for  
19 Facebook, right?

20 MR. DAVIS: Objection. Form. 04:45:11

21 THE DEPONENT: The updates that were  
22 announced on April the 30th, 2015, were -- were  
23 certainly seen as a significant change to the  
24 developer platform and a significant step forward  
25 for -- for users. 04:45:28

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1 Q. (By Mr. Loeser) And Facebook did a 04:45:31  
2 significant amount of planning and preparation in  
3 advance of rolling out that platform, right?

4 A. Given the nature of the changes, a good  
5 number of people were involved in determining what 04:45:48  
6 they were. How to roll them out. And -- and how  
7 to manage the developer ecosystem's transition to  
8 the new world.

9 Q. And this deck that you prepared was part  
10 of that planning and preparation for the rollout of 04:46:04  
11 the new platform, right?

12 A. This deck represents a very, very early  
13 version of the thinking as to how these changes  
14 might be rolled out.

15 Q. So when you say "use existing policies to 04:46:20  
16 revoke apps access," in order to revoke apps access  
17 with existing policies, that would mean that the  
18 app was violating the existing policies, right?

19 MR. DAVIS: Objection. Form.

20 THE DEPONENT: Facebook doesn't have a 04:46:40  
21 view on what is meant here. And I don't recall  
22 what I meant when I was -- I was writing this.

23 This is the only time I've seen a  
24 reference to pre-enforcement anywhere. So it's  
25 possible that this was a -- an unusual suggestion 04:46:57

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1 on my part. I do not recall what caused me to add 04:47:03  
2 this bullet into the deck.

3 Q. (By Mr. Loeser) So it wouldn't make  
4 sense to -- to revoke app access with existing  
5 policies, if those policies weren't being violated, 04:47:11  
6 would it?

7 MR. DAVIS: Objection. Form.

8 THE DEPONENT: I think typically  
9 revoking, changing what an app can do outside of a  
10 policy would be certainly an usual thing to do. 04:47:27

11 Q. (By Mr. Loeser) So your next bullet is  
12 "Standard," and then it says "(default)."

13 "Apps are notified on P-day and have  
14 n-days to comply (vast majority of apps)."

15 And I'm going to interpret this for you 04:47:43  
16 and you tell me if I'm right or wrong.

17 What you're suggesting here is that on  
18 the day that the new platform is introduced,  
19 telling apps that they have a number of days to  
20 comply with the requirements of the new platform; 04:47:54  
21 is that right?

22 A. That's right. And ultimately,  
23 essentially, what occurred for most developers.

24 Q. Okay. And then your next bullet is  
25 "Extension." 04:48:10



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1 And you write "Apps given n+x days to 04:48:10  
2 comply due to long upgrade cycles e.g. devices  
3 (Smart TV, in car, mobile OS's)."

4 Now, is this the -- the category that  
5 you've provided testimony about already that 04:48:25  
6 explains why extensions were given to certain apps  
7 and developers?

8 MR. DAVIS: Objection. Form.

9 THE DEPONENT: The -- this -- this deck  
10 was written a long time before the changes were 04:48:38  
11 announced, and then a long time before decisions  
12 were ultimately made about whether or not someone  
13 should be given an extension.

14 So I don't want to connect the two  
15 specifically because at this point those -- the 04:48:55  
16 exact determination had not been made. So this is  
17 proposing a model where some apps might be given  
18 additional time.

19 The thing I will also point out here is  
20 my recollection is at the time that this deck was 04:49:15  
21 written, the proposal was to implement the changes  
22 in 90 days. And when changes of this nature are  
23 introduced in -- in a 90-day time period, not all  
24 developers can react at that speed. It takes many  
25 companies often longer than that to write code and 04:49:42

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1 ship it to production or to their users. 04:49:46

2 And so this -- this category is on this  
3 deck here, again, in my personal recollection,  
4 given the expectation at the time that the changes  
5 would be rolled out in a 90-day time period. 04:50:02

6 Q. (By Mr. Loeser) And -- and so just --  
7 you know, I asked you on Monday, and a little bit  
8 this morning, to explain all the reasons why -- why  
9 apps or partners were given access to deprecated  
10 permissions. 04:50:20

11 And -- and one of the categories you  
12 described was an extension and -- and -- and this  
13 bullet is consistent with your earlier testimony.

14 Perhaps the length of time changed, but  
15 the notion of providing an extension for those 04:50:33  
16 reasons is what you indicated previously; is that  
17 right?

18 A. The suggestion on the slide here is -- is  
19 broadly consistent with -- ultimately, one of the  
20 reasons why several extensions were granted. 04:50:46

21 Q. Okay. Let's -- let's look at the next  
22 bullet here on this slide, which says "Exception,  
23 Apps to be whitelisted indefinitely due to their  
24 strategic value to Facebook e."

25 Do you see that? 04:51:04

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1 A. I do see that. 04:51:05

2 Q. And we had a conversation a few minutes  
3 ago about strategic value to Facebook and you were  
4 unable to describe what that meant to Facebook and  
5 expressed some lack of familiarity -- familiarity 04:51:15  
6 with the term "strategic value."

7 Does this provide you with better context  
8 to understand what Facebook has in mind with the  
9 expression "strategic value" to Facebook?

10 MR. DAVIS: Object to the form. 04:51:27

11 THE DEPONENT: Again, back to my earlier  
12 testimony of -- strategic value, as a phrase, is  
13 not a defined term at the company and could mean  
14 many different things in many different contexts.

15 In a personal capacity, my -- my 04:51:43  
16 recollection, when writing this deck, is that it  
17 was -- I thought there would be some apps that the  
18 business -- the -- the leadership team might  
19 consider for continued access.

20 But in this deck, I'm not specific as to 04:52:10  
21 what that is. And I don't recall having a clear  
22 understanding or defined understanding of -- of --  
23 of what that meant.

24 Q. (By Mr. Loeser) Who was the intended  
25 audience of this slide deck? 04:52:35



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1 Doug? Vernal? What about mobile apps, companies 04:54:10  
2 with sales-led relationships."  
3 Do you see that?  
4 A. I see that.  
5 Q. And how is that question answered? 04:54:20  
6 A. I do not recall that question being  
7 answered.  
8 Q. So does Facebook -- can Facebook tell the  
9 Court who it put on the review board -- well, first  
10 of all, was there a review -- a review board to 04:54:35  
11 classify apps using to-be-deprecated features?  
12 A. No. No review board was set up.  
13 Q. And -- and I asked you before and I'll  
14 ask you again, do you know who made the final  
15 decisions on how to classify apps using 04:54:55  
16 to-be-deprecated features?  
17 MR. DAVIS: Objection. Form.  
18 THE DEPONENT: Can you ask me the  
19 question again. I think it's important to --  
20 MR. LOESER: Sure. Sure. 04:55:10  
21 THE DEPONENT: -- to understand.  
22 Q. (By Mr. Loeser) Yeah. I see that the  
23 question is slightly different than I asked before.  
24 So that's a fair clarification.  
25 Who made the decision on how to classify 04:55:17

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1 apps using to-be-deprecated features? 04:55:19

2 MR. DAVIS: Object to the form.

3 THE DEPONENT: I don't think any -- I

4 don't think any, in parti- -- single person de- --

5 decided that it was a classification of apps for 04:55:34

6 using to-be-deprecated features.

7 Q. (By Mr. Loeser) And then if you look at  
8 the last bullet, it says "If we grant an exception,  
9 does that [REDACTED]"

10 Do you know how that question was 04:55:52  
11 answered?

12 A. I don't know how that question was  
13 answered.

14 Q. So let's go to the -- there's an appendix  
15 to this -- to this deck, and we can go to the first 04:56:07  
16 slide of the appendix.

17 And you see there's two columns,  
18 "NewsFeed API."

19 Is -- is that a reference to read stream  
20 permission? 04:56:33

21 A. Yes, the first column refers to the --  
22 the read stream permission.

23 Q. And the second column is "Non-App-Friends  
24 data."

25 And from this, it appears that's a 04:56:43

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1 reference to the permissions -- for the friends 04:56:48

2 permissions?

3 A. That's correct.

4 Q. And if you look there, there's a list of

5 different types of app below on each column; is 04:56:59

6 that right?

7 A. There are some -- there are some apps,

8 yes.

9 Q. And then with regard to each of the

10 categories of app, there's a recommendation as to 04:57:16

11 whether to keep access or remove access to the --

12 in the first column, the "NewsFeed API," and the

13 second column, the "Non-App-Friends data"; is that

14 right?

15 A. Yeah. 04:57:33

16 Q. And who -- who's making that

17 recommendations that's identified there?

18 A. The recommendation is in a -- in a deck

19 that I was involved in producing. But I don't

20 recall if there were other people involved in that 04:57:46

21 recommendation.

22 Q. And if you look at the first header on

23 the newsfeed API, so the read stream, it says -- or

24 I'm sorry -- the first type of app identified,

25 "Strategic mobile & replica apps." 04:58:06

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1 Do you see that? 04:58:09

2 A. I do.

3 Q. And the "Recommendation" is "keep  
4 access"?

5 A. I see that. 04:58:14

6 Q. Was that recommendation followed by  
7 Facebook?

8 A. The -- the -- the apps listed here, to  
9 me, look like mobile device integration partners,  
10 which is a program that continued after the 04:58:33  
11 announcement of API v2.

12 Q. So it appears that the recommendation was  
13 followed?

14 A. Well, what I understand happening is  
15 consistent -- ultimately is consistent with our 04:58:49  
16 recommendation.

17 Q. And if you look at the last category on  
18 the list there for "NewsFeed API," it says "Other  
19 Strategic e.g. [REDACTED],

20 [REDACTED] and the "recommendation" is "case by 04:59:02  
21 case basis."

22 Was that recommendation followed?

23 A. I don't know the specifics of -- of -- of  
24 whether or not that recommendation was followed.

25 It would require me to know on an individual app 04:59:13

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1 basis, which is -- is not something I have prepared 04:59:18  
2 to testify on.

3 Q. So do you know if -- well, are [REDACTED]  
4 [REDACTED] partners that  
5 Facebook identifies as having strategic value to 04:59:30  
6 Facebook?

7 MR. DAVIS: Objection. Form.

8 THE DEPONENT: Those apps are -- are  
9 listed in that category, but I -- I'm not a  
10 determiner of what was considered strategic or not. 04:59:44  
11 They are listed here under -- under that framing.

12 Q. (By Mr. Loeser) And Facebook can't  
13 testify today as to whether [REDACTED]  
14 [REDACTED] were provided access on a  
15 case-by-case basis to newsfeed APIs after the new 05:00:02  
16 platform was introduced?

17 MR. DAVIS: Objection. Form.

18 THE DEPONENT: On a specific app-by-app  
19 basis, I have not revised exactly what happened  
20 with each of the apps listed here. 05:00:16

21 Q. (By Mr. Loeser) Let's look at the next  
22 column "Non-App-Friends data."

23 At the top it says "Apps recently  
24 requesting permissions," and it has the number  
25 [REDACTED] 05:00:30

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1 Do you see that? 05:00:32

2 A. Yeah.

3 Q. And then it says "Apps recently accessing  
4 the API," and then it says "Unknown due to  
5 instrumentation issues."

05:00:40

6 What -- what -- what does that refer to?

7 A. I don't recall exactly what those --  
8 what that -- what that means. So hard for me to  
9 say today, nine years later.

10 Q. And if you wanted to -- if Facebook  
11 wanted to answer that question, where would it go  
12 to get the answer?

05:00:55

13 A. Sorry.

14 Today? You're asking me today where  
15 would I go to answer the --

05:01:09

16 Q. Yeah.

17 A. Where would I go to answer the question  
18 to -- as in using the API today, or where would I  
19 go to answer the question who was using the API in  
20 2013?

05:01:19

21 Q. I -- I'm asking where you would go to  
22 develop an understanding of what you meant when you  
23 said "Unknown due to instrumentation issues."

24 A. I -- as the author of the deck speaking  
25 there, I -- the only person that would know likely

05:01:35

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1 is me. And I do not recall what those 05:01:40

2 instrumentation issues were.

3 Q. So for the newsfeed API, you were able to  
4 identify the apps recently accessing the API.

5 How did you do that? 05:01:51

6 A. I would have used the HiPal tool.

7 Q. And would you have attempted to do the  
8 same thing for identifying apps that recently  
9 accessed the non-app-friends data APIs?

10 A. I would have attempted to do the same 05:02:11

11 thing. But I am not a data scientist. And so  
12 my -- my skills of data are not the -- of a  
13 professional -- of a highly professional standard.  
14 I'm competent, but not a professional data  
15 scientist. 05:02:30

16 Q. Well -- okay. So if you look at the  
17 first category of apps on the "Non-App-Friends  
18 data" column, the first one is also "Strategic  
19 mobile & replica apps," and the "Recommendation" is  
20 "keep access." 05:02:45

21 Is it your -- did Facebook follow that  
22 recommendation?

23 MR. DAVIS: Object to the form.

24 THE DEPONENT: I cannot say if Facebook  
25 followed the recommendation. That would suggest 05:02:54

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1 that the recommendation was in itself listened to. 05:02:56

2 But as with my previous testimony on the

3 first column, my understanding from this is that

4 [REDACTED] were classified as device

5 integration partners, which was a separate program 05:03:14

6 that continued after the announcement of API v2.

7 And so my understanding is that is consistent with

8 what ultimately happened.

9 Q. (By Mr. Loeser) And so for that

10 category, "Strategic, mobile and replica apps," 05:03:33

11 those companies continued to have access to friend

12 permissions; is that right?

13 MR. DAVIS: Object to the form.

14 THE DEPONENT: As we've discussed

15 previously, the device integration partners had 05:03:49

16 access to a number of private APIs to allow them to

17 build Facebook replacement clients on third-party

18 devices.

19 Q. (By Mr. Loeser) And those private APIs

20 allowed access to -- to friends data, right? 05:04:05

21 A. Those private APIs allowed the third

22 parties to build experiences that replicate the

23 Facebook experience on those devices, which would

24 have allowed them to include things like the

25 newsfeed, which would have included friends data. 05:04:24

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1 Q. And also they had access to the -- to the 05:04:26  
2 friends permissions as well, right?

3 A. The way these -- the way that the  
4 Facebook replacement clients were implemented, they  
5 had access to the information. But the way that 05:04:40  
6 that information was granted was not through the  
7 standard Facebook login dialogue.

8 Q. Right. I understand that. But I'm  
9 just -- this is in a column for "Non-App-Friends  
10 data," and I just wanted to be clear that the 05:04:50  
11 "Strategic, mobile & replica apps" continued to  
12 have access to "Non-App-Friends data," right?

13 A. The apps listed here, yes, as I  
14 understand it, continue to have access to friends  
15 data after -- yes, continue to have access to 05:05:04  
16 friends data until -- until later.

17 Q. And -- and when you say "later," you mean  
18 after the API Graph version 2 was implemented?

19 A. After API version 2 is implemented, yes.

20 Q. Now, one of the categories here is 05:05:23  
21 "Lifestyle & Dating," and it says "e.g. [REDACTED]  
22 [REDACTED] and the  
23 "Recommendation" is "special consideration for  
24 dating apps (see KP)."

25 Do you see that? 05:05:37

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1 A. I see that. 05:05:37

2 Q. And what were the special considerations  
3 that Facebook applied for dating apps?

4 A. Dating apps were seen as a good use case  
5 of the Facebook developer platform. And there was 05:05:52  
6 discussion about how to enable them to continue to  
7 provide a great user experience while minimizing  
8 the amount of information they needed to perform  
9 that function.

10 Q. So after the transition to Graph API 05:06:11  
11 version 2, or as it referred in this deck,  
12 platform 3, dating apps continued to have access to  
13 "Non-App-Friends data"?

14 MR. DAVIS: Objection. Form.

15 THE DEPONENT: That's -- dating 05:06:24  
16 apps were -- there was a new API built for dating  
17 apps that allowed them to continue to build  
18 recommendations without having any personally  
19 identifiable information available to them.

20 Q. (By Mr. Loeser) And so did those dating 05:06:43  
21 apps -- dating apps continue to have access to what  
22 is referred to on this slide as "Non-Apps-Friends  
23 data?

24 MR. DAVIS: Objection. Form.

25 THE DEPONENT: They had access to an API 05:06:56

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1 that gave them the ability to understand the number 05:06:58  
2 of mutual friends that people have in common  
3 without any personally identifiable information  
4 about those people being emitted.

5 Q. (By Mr. Loeser) And did it provide them 05:07:10  
6 with access to "Non-App-Friends data"?

7 MR. DAVIS: Objection. Form.

8 THE DEPONENT: Can you define for me in  
9 this context what you mean by "Non-App-Friends  
10 data"? 05:07:20

11 Q. (By Mr. Loeser) Well, what did you mean  
12 when you wrote that on the top of this slide?

13 A. Well, in this case, I'm referring  
14 specifically to a set of permissions and  
15 specifically to a set of example methods. 05:07:31

16 Dating apps did not have access -- my  
17 understanding is dating apps did not have access --  
18 in general, dating apps did not have access to  
19 those permissions or those -- and, therefore, able  
20 to use those methods to access friend data after 05:07:52  
21 the transition.

22 Q. But they did have access to some friends  
23 data after the transition?

24 MR. DAVIS: Objection. Form.

25 THE DEPONENT: As I've testified, my 05:08:04

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1 understanding is they had access to a new API that 05:08:05  
2 granted them the ability to understand mutual  
3 friends in common of two app users without having  
4 any personally identifiable information emitted.

5 That's very different in form to the rest 05:08:21  
6 of how the friends data and friends permissions  
7 worked.

8 Q. (By Mr. Loeser) Let's go to the last  
9 bullet on here, "Other Strategic," and it says  
10 "e.g. [REDACTED]," and the 05:08:36  
11 "Recommendation" is "case by case basis."

12 Is that -- is that how Facebook proceeded  
13 with regard to the apps identified on your slide  
14 here as "Other Strategic"?

15 A. Again, on -- on a -- on a specific 05:08:57  
16 app-by-app basis, I don't -- I don't know here  
17 today, in my head, what happened to each of the --  
18 the apps listed here.

19 Q. And then if you look at the next slide,  
20 there's a whole slide devoted to the topic of 05:09:12  
21 "Strategic Partners & Exceptions."

22 Does this help you understand what  
23 Facebook means by strategic partners?

24 A. There are certainly some examples here  
25 that are -- that seem to be classified as the 05:09:26

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1 strategic partners. 05:09:29

2 But, again, to determine whether or  
3 not -- I was not at this time the person  
4 determining whether or not these were seen as  
5 strategic partners. 05:09:37

6 Q. And -- and Facebook -- having looked at  
7 this slide on behalf -- you cannot testify on  
8 behalf of Facebook, as its designee, what Facebook  
9 means by strategic partners?

10 A. This slide is written by a person in the 05:09:57  
11 partnerships team and -- and representative of the  
12 partnerships team's opinions, so I think it's  
13 consistent with what the partnerships team would  
14 have defined as a strategic partner.

15 Q. Okay. Why don't we look at the next 05:10:13  
16 slide.

17 Here's another entire slide devoted to  
18 identification of strategic partners and  
19 exceptions.

20 Do you see that? 05:10:20

21 A. I do.

22 Q. And does that help you, as Facebook's  
23 designee, to describe for me what Facebook means by  
24 strategic partners?

25 A. Again, this is what I think the strategic 05:10:29

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1 partnerships team were to classify as strategic 05:10:31  
2 partners.

3 Q. Okay. Let's look at the next slide.

4 This is another entire slide devoted to  
5 the topic of strategic partners and exceptions. 05:10:40

6 Does this help you, as Facebook's  
7 designee, to testify as to what Facebook means by  
8 strategic partners?

9 A. This helps me identify that these are  
10 partners that the platform partnerships team would 05:10:54  
11 have designated as strategic partners.

12 Q. And is there some other organization at  
13 Facebook that would -- that would also weigh in on  
14 how Facebook classifies partners as strategic?

15 MR. DAVIS: Objection. Form. 05:11:13

16 THE DEPONENT: There are several  
17 partnerships teams at Facebook working on different  
18 types of things. Each of them would maybe have had  
19 their own designation of what partners meant and  
20 which would -- and -- and how to categorize them. 05:11:30

21 There wasn't just one partnerships team at  
22 Facebook.

23 Q. (By Mr. Loeser) And so if you, as  
24 Facebook's corporate designee, wanted to develop a  
25 complete understanding of what Facebook means by 05:11:39

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1 strategic partners, where are all the places that 05:11:42

2 you would go for that answer?

3 MR. DAVIS: Object to the form.

4 THE DEPONENT: I'm not sure. It would be

5 possible to develop a full understanding -- a full 05:11:53

6 list of different teams of the company that may or

7 may not classify -- that work -- classify partners

8 and may or may not classify them as strategic.

9 MR. LOESER: Okay. We can go to the next

10 exhibit. 05:12:17

11 MR. DAVIS: Mr. Loeser, we've been going

12 about an hour and a half. Would this be an

13 opportune time for a short break?

14 MR. LOESER: Sure. That's fine.

15 Ten minutes. 05:12:23

16 SPECIAL MASTER GARRIE: Wait. Before

17 we -- we do that, Mr. -- Mr. Cross, how long would

18 you like?

19 MR. LOESER: Rebecca --

20 THE DEPONENT: Ten minutes is good for 05:12:35

21 me.

22 SPECIAL MASTER GARRIE: And Rebecca, does

23 ten minutes work for you?

24 THE COURT REPORTER: Yes.

25 SPECIAL MASTER GARRIE: You're very 05:12:39

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1 important to this whole process. Your happiness is 05:12:39  
2 critical to the entire transaction.

3 MS. DAVIS: Off the record.

4 (Discussion off the stenographic record.)

5 THE VIDEOGRAPHER: Okay. We're off the 05:13:00  
6 record. It's 5:13 p.m.

7 (Recess taken.)

8 THE VIDEOGRAPHER: We're back on the  
9 record. It's 5:36 p.m.

10 Q. (By Mr. Loeser) Mr. Cross, previously, 05:36:19  
11 when I was asking you about who made the decision  
12 about how to decide which partners would continue  
13 to have access to friend data, you mentioned the --  
14 the platform leadership team, in addition to the  
15 platform partnership group; is that right? 05:36:36

16 A. The platform leadership team -- the  
17 platform product leadership team would have been  
18 involved in those conversations.

19 Q. And who at the platform -- I'm sorry.

20 What is the full name of that group, the 05:36:53  
21 platform -- platform leadership...

22 A. So just the Facebook platform team, that  
23 would have been the name of it. And then the kind  
24 of -- the leadership team would have been -- the --  
25 the senior product and engineering people as part 05:37:08

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1 of that group. 05:37:11

2 Q. And who were those people?

3 A. Some names that come to mind, I can't --

4 well, I -- can't be specific as to time. But some

5 names that come to mind around the time of this 05:37:29

6 period, 2013 to 2015, Mike Vernal, Doug Purdy,

7 Ilya Sukhar and Vladimir Fedorov.

8 MR. LOESER: Okay. Thank you.

9 If we can put up what's previously been

10 marked as Exhibit 20. 05:37:49

11 Q. (By Mr. Loeser) And Mr. Cross, you

12 should be looking at Exhibit 20, which is an email

13 from you to a number of people.

14 First in the list is Quinn Duffy and also

15 Namita Gupta and Amir Naor and KP, among others, 05:38:37

16 with a cc to Eddie O'Neil.

17 The subject is "Capabilities Tool,

18 improvement requests - feedback by EOD Sunday,

19 please" with the attachment "Capability Audit

20 24 Oct 2013.xlsx." 05:38:51

21 Do you see that?

22 A. I do.

23 Q. And the date of your email is

24 October 24th, 2013; is that correct?

25 A. That's correct. 05:39:02

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1 Q. And I'll read -- the first paragraph of 05:39:02  
2 your email states "Over the last few weeks, you'll  
3 have noticed Engineering have moved many app-based  
4 GKs over to the new Capabilities tool."

5 What are app-based GKs? 05:39:15

6 A. So as we previously talked about, GK  
7 refers to gatekeeper, which is a tool inside  
8 Facebook. And app-based GK is a gatekeeper that  
9 takes an app ID as an input rather than a user ID,  
10 for example. 05:39:34

11 Q. And you write "Going" -- thank you.

12 "Going forward, this tool is going to be  
13 a much" part much -- I'm sorry -- "to be a much  
14 larger part of our lives - its where the vast  
15 majority of whitelists will be managed." 05:39:45

16 Is that, in fact, what -- what happened,  
17 is that -- and I think you testified about this on  
18 Monday -- the capabilities tool became the place  
19 where the vast majority of whitelists were managed,  
20 right? 05:40:00

21 A. Our intention at the time was to make the  
22 capability tool the -- the way the -- what platform  
23 application whitelists were managed. That was  
24 the -- that -- that was the plan for the  
25 capabilities tool over time. 05:40:14

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1 Q. Okay. And then you next write "Platform 05:40:15  
2 Simplification is about to introduce even more  
3 whitelists - such as allowing apps to be exempt  
4 from the transition to hashed UUIDs, or be able to  
5 continue using read\_stream or friends\_\*perms." 05:40:28

6 Did I read that correctly?

7 A. You did read that correctly.

8 Q. And is platform simplification there a  
9 team or an event?

10 A. Neither. Platform simplification refers 05:40:41  
11 to the program of work, I guess you would call it,  
12 that ultimately came to be the changes we launched  
13 on April 30th, 2014, otherwise as known as  
14 platform 3.0.

15 Q. Okay. And did platform simpli- -- 05:41:02  
16 simplification, in fact, introduce even more  
17 whitelists?

18 A. It introduced -- as a result, there were  
19 a small number of additional whitelists added, but  
20 not a large number. 05:41:18

21 My recollection at the time, in my  
22 personal capacity here, is that the expectation was  
23 that there would be -- the expectation I had is  
24 that we might need a -- a number of new whitelists.

25 In actual fact, a very small number were 05:41:40

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1 ultimately needed due to the decisions taken as to 05:41:43  
2 how the changes would be rolled out.

3 Q. And how many whitelists were introduced  
4 to continue -- to enable apps to continue using  
5 read stream or friends permission? 05:41:56

6 A. I couldn't tell you today exactly how  
7 many new capabilities were added to the capability  
8 tool.

9 Q. And where would Facebook go to get an  
10 answer to that question? 05:42:09

11 A. I would go and ask the platform  
12 engineering team to see if they could determine  
13 which capabilities were added and when.

14 Q. And that's not something that you did to  
15 prepare for your testimony today? 05:42:26

16 A. I talked to the platform engineering team  
17 about a number of issues, but not the specific  
18 question of exactly how many new capabilities were  
19 added back in 2013, '14.

20 MR. LOESER: And I'm going to ask really 05:42:44  
21 you, but through your counsel, since we'll be back  
22 on Monday, if that's a question that you could  
23 obtain an answer for, since it's clearly under the  
24 heading of the whitelisting topic that is indicated  
25 in your notice. 05:42:59

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1 MR. BLUME: Noted. And we can discuss it 05:43:02  
2 offline.

3 MR. LOESER: So let's go to the next  
4 exhibit, which is previously been marked  
5 Exhibit 13. 05:43:12

6 Q. (By Mr. Loeser) And Mr. Cross, we are  
7 showing you what's previously been marked  
8 Exhibit 13, which is an email from you to  
9 Jackie Chang, Ime Archibong, KP, Bryan Hurren and  
10 Monica Mosseri. 05:43:56

11 Do you see that?

12 A. I do.

13 Q. And the date of the email is  
14 December 10th, 2013. And the subject is "Re:  
15 Simon's Updates - 6th Dec." 05:44:02

16 Do you see that?

17 A. I do.

18 Q. Who is Bryan Hurren?

19 A. Bryan Hurren was, if I recall correctly,  
20 a strategic partner manager on the platform 05:44:16  
21 partnerships team.

22 Q. So there's a group at Facebook that is  
23 referred to as the strategic partner group?

24 A. The job title I recall having -- that  
25 these folks had at the time -- including I had at 05:44:31

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1 the time -- was strategic partner manager and -- 05:44:35  
2 and the platform partnerships team was the team you  
3 were part of.

4 Q. And I'm sorry, did you say that you were  
5 part of the strategic -- strategic partner group as 05:44:44  
6 well?

7 A. At this time I was a partner manager on  
8 the platform partnerships team, yes.

9 Q. The strategic partnership team?

10 A. The name of the team was the -- I -- I 05:44:58  
11 recall the name of the team being the platform  
12 partnerships team.

13 Q. Okay. And is that the same team that  
14 Bryan Hurren was on?

15 A. Yes. 05:45:11

16 Q. Who is Monica Mosseri?

17 A. She was another partner manager on the  
18 team.

19 Q. So now this -- the subject of this email  
20 is indicated "Simon's Updates." 05:45:28

21 Were -- were you creating regular updates  
22 regarding platform simplification?

23 A. I -- I was involved in updating my team  
24 about the things I was working on, and platform  
25 simplification was one of the things I was working 05:45:50

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1 on at the time. 05:45:55

2 Q. Okay. So let's go to the -- the third  
3 page of this email string. The Bates on this page  
4 is FB-CA-MDL-00200698. And the heading I'm looking  
5 at is "Platform Simplification." 05:46:09

6 And if you look under that heading, can  
7 you read the third bullet in that -- under that  
8 heading?

9 A. "Key focus this week is to pull  
10 additional data on apps and capabilities to allow 05:46:29  
11 the 4 partnerships teams" to -- "(Games, Non-games,  
12 Mobile, Marketers) to pre-approve apps for the new  
13 whitelists, and review their apps with existing  
14 whitelists."

15 Q. Okay. And so based upon this update, it 05:46:43  
16 is -- it is true, is it not, that Facebook was  
17 identifying particular apps so that it could  
18 preapprove them to -- to continue having access to  
19 friend data, right?

20 A. Well, first of all, the -- it doesn't -- 05:47:04  
21 the new whitelist doesn't necessarily mean friend  
22 data, right. You need to be specific about that.  
23 Whitelist and friends data are not synonyms.

24 The -- what's on the slide deck here is,  
25 again, in a personal capacity, me talking about an 05:47:21

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1 initiative that was proposed to be done in the 05:47:27  
2 coming week.

3 Q. Okay. And -- and thank you for  
4 clarification on -- on friends data. The project  
5 was broader than that. 05:47:37

6 This was looking at the -- the -- the  
7 permissions that would be deprecated more broadly  
8 in the platform simplifications process, right?

9 A. The platform simplification at this time,  
10 which again is several months before it happened, 05:47:55  
11 and a lot changed between then and the  
12 announcement.

13 What I'm referring to here is -- is the  
14 broader package of work, which included a large  
15 number of other changes to the API as well. 05:48:08

16 Q. Okay. And so, nonetheless, Facebook was  
17 endeavoring to preapprove certain apps for the new  
18 whitelist that would be implemented in connection  
19 with the introduction of platform 3, right?

20 A. I don't think it's fair to say Facebook 05:48:26  
21 was. I, as a partner manager, was proposing that  
22 we do a piece of work like this, although I do not  
23 recall us doing so.

24 Q. And if Facebook wanted to be able to  
25 testify as to whether there was work done to 05:48:48

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1 preapprove apps for the new whitelist, how would 05:48:50

2 Facebook go about getting that information?

3 MR. BLUME: Objection. Form.

4 THE DEPONENT: I would try and see if any

5 documents existed from the time that would pertain 05:49:09

6 to such an effort. I -- again, like -- I don't

7 think the -- what -- what you're seeing in this

8 email and the previous slide deck is a bunch of

9 people trying to figure this out, very differently

10 from what ultimately happened and transpiring. 05:49:33

11 So to answer your question, where would I

12 go. I would go and speak to the -- the other

13 people on this thread, if they still exist, and see

14 if they recall any documents that were produced

15 around this time that might pertain to this bullet. 05:49:50

16 I do not recall --

17 Q. (By Mr. Loeser) And you haven't --

18 A. Sorry. Go on.

19 Q. No, go ahead. I'm sorry.

20 A. I -- I do not recall pre-approving or 05:50:01

21 being involved in pre-approving apps for -- for the

22 new whitelists at this time.

23 Q. And you did not go talk to any of the

24 persons on this thread in order to identify whether

25 any apps were pre-approved for the new whitelists? 05:50:23

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4                   Specifically, as the next step, I'm not  
5   sure I've seen a bullet that -- that talks about                   05:50:39  
6   what happened after this.  And I don't -- I don't  
7   recall what my next -- what my next actions were.

12           A.    We didn't -- I didn't talk about  
13   pre-approving because that's not -- doesn't  
14   resonate with me as a concept at the time.

19 Q. And can you read the last bullet on your  
20 list here. 05:51:32

25 | A. I do not recall what Jackie did. You 05:51:45

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1 might want to ask her. 05:51:49

2 Q. And that would be the natural way to find  
3 out what Jackie did, right?

4 A. That would be a reasonable thing to do.

5 Q. And -- and is that what Facebook would 05:52:01

6 do, if Facebook wanted to answer the question  
7 whether Jackie led on putting together a new  
8 whitelist process with legal and product?

9 MR. BLUME: Objection. Form.

10 THE DEPONENT: To that very specific 05:52:14

11 question, it might -- if Jackie was -- if I -- if  
12 Jackie was available, then speaking to her about  
13 that might -- might be a way to get clarity. But  
14 it's not certain, given it would be relying on her  
15 recommendation -- her recollection. 05:52:32

16 Q. (By Mr. Loeser) Let's go to the next --  
17 go up the string to the email from you dated  
18 November 25th, 2013. "Subject: Re: Simon's  
19 Updates - 22nd Nov."

20 So this is another update you provided 05:52:53  
21 about the work that you were doing at the time,  
22 right?

23 A. Yes.

24 Q. Okay. And if you go down to the portion  
25 of that -- it's on the next page of your update -- 05:53:08

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1 [REDACTED] 05:54:14

2 [REDACTED]

3 A. I honestly don't recall what Jackie did.

4 And I think, again, the best -- the best way to

5 understand -- understand that would be to ask her. 05:54:27

6 I do not recall what -- what she did or

7 what the outcome was. And I don't recall anything

8 that -- outputting from this being ultimately used

9 a year and a half later.

10 Q. Okay. So what was the [REDACTED] 05:54:48

11 [REDACTED]

12 [REDACTED] apps that was developed at Facebook?

13 MR. BLUME: Objection. Scope. Form.

14 THE DEPONENT: Yeah. I'm not sure I can

15 answer that in -- in Facebook's capacity. I'm not 05:55:05

16 sure there was a -- a single process for

17 whitelisting apps.

18 I can talk in a personal capacity about

19 my involvement at the time, which was to improve

20 the capability tool as to how whitelists were 05:55:27

21 requested and granted.

22 Q. (By Mr. Loeser) And other than what

23 you've previously -- previously testified to, is

24 there a -- was there a process for whitelisting

25 apps that -- that was adopted by Facebook? 05:55:57

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1 MR. BLUME: Objection. Scope and form. 05:56:01

2 THE DEPONENT: There was a -- a technical  
3 process for whitelisting apps which allowed --  
4 which enabled a -- which was implemented through  
5 the capabilities tool. 05:56:16

6 Q. (By Mr. Loeser) And was there a formal  
7 document or protocol to be used when deciding what  
8 apps to whitelist?

9 A. I do not recall a -- a formal document or  
10 protocol. And it did -- deciding -- well, let 05:56:32  
11 me -- let me wind back.

12 Deciding to whitelist for what?

13 Q. For permissions that were going to be  
14 deprecated with the transition to platform 3.

15 A. So the -- the -- so specifically, 05:56:56  
16 extensions to the Graph API -- API v1 deprecation?

17 Q. Yes.

18 A. The -- and so what was your original  
19 question?

20 I'm sorry. I want to make sure I answer 05:57:15  
21 it.

22 Q. Sure.

23 Was there a formal document or protocol  
24 to be used when deciding what apps to whitelist?

25 A. I don't recall there being a formal 05:57:28

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1 document or protocol. 05:57:29

2 Q. And if Facebook were to answer that  
3 question, where would Facebook go to identify an  
4 answer?

5 MR. BLUME: Objection. Form. 05:57:45

6 THE DEPONENT: I would attempt to speak  
7 to -- to Jackie potentially and -- and maybe Eddie  
8 as if to -- their recollection as -- as to how this  
9 process was -- was managed.

10 Q. (By Mr. Loeser) And -- and you did not 05:58:02  
11 do that to testify -- to prepare yourself to  
12 testify today, is that right, about this particular  
13 topic?

14 A. I talked to Eddie, Ime and a few other  
15 people to ask on their recollection of -- of -- of 05:58:17  
16 how -- specifically why we decided -- why  
17 partners -- their recollection as to why certain  
18 entities were granted extensions, and I reviewed  
19 some internal documents on the topic.

20 Q. But you didn't ask them if there was a 05:58:42  
21 formal document or protocol to be used when making  
22 whitelisting decisions?

23 A. I did not ask them that specific  
24 question.

25 MR. LOESER: And similar to what I said 05:58:51

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1 before, and via your counsel, if that's a question 05:58:53  
2 you could be prepared to answer when we come back  
3 on Monday, that would be useful for this process.

4 MR. BLUME: Noted.

5 Q. (By Mr. Loeser) Okay. So let's look at 05:59:09  
6 the -- let's look at the next bullet on your update  
7 here.

8 It says "New whitelists for public  
9 deprecations - close to finalizing with Product  
10 (Eddie and Harshdeep) a set of 54 new Capabilities 05:59:15  
11 we need to add to allow us to whitelist partners  
12 past the public deprecations. Next step is to map  
13 apps against these and start making  
14 no/extension/exemption decisions."

15 Do you see that? 05:59:32

16 A. I do see that.

17 Q. And so these 54 new capabilities were  
18 necessary to allow Facebook to whitelist partners  
19 past the public deprecations; is that right?

20 A. I -- the -- the email references 54 new 05:59:47  
21 capabilities. I do not recall, again, personal  
22 veracity, that those were created.

23 Q. And so in order to allow Facebook to  
24 whitelist partners past the public deprecations,  
25 Facebook obviously had to do some advance work 06:00:14

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1 before the new platform was introduced; is that 06:00:18

2 right?

3 A. There was work done to ensure that as the  
4 platform announcements were made, that we had tools  
5 to control the rollout. 06:00:35

6 Q. And it took some time to develop the  
7 tools that would enable certain apps and partners  
8 to have access to the publicly deprecated  
9 permissions after the rollout of the new platform;  
10 is that right? 06:00:51

11 A. It would have taken an engineer some time  
12 to write some code, yes.

13 Q. And then you write, "Next step is to map  
14 apps against these and start making  
15 no/extension/exemption decisions." 06:01:03

16 And those were decisions that needed to  
17 be made in advance of the rollout of the platform  
18 as well; is that right?

19 A. No.

20 Q. Okay. Did Facebook make decisions about 06:01:15  
21 no extension and -- no/extension/exemption  
22 decisions in advance of the rollout of  
23 platform 3.0?

24 A. I do not recall extension, exemptions  
25 decisions being made before the rollout of the 06:01:36

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1 platform. It's possible that there was some 06:01:39  
2 opinions about what would be done. But remember,  
3 the rollout took a year and the discussions about  
4 extensions were towards the end of that period.

5 Q. And what about exemptions, when did those 06:02:04  
6 discussions start?

7 A. The -- you're talking there really about  
8 the integration partners, which was considered  
9 separate from this process.

10 Q. And so Facebook interprets exemption to 06:02:23  
11 refer solely and specifically to integration  
12 partners?

13 MR. BLUME: Objection.

14 THE DEPONENT: In this case -- sorry. Go  
15 on, Rob. 06:02:35

16 MR. BLUME: Objection. Form.

17 THE DEPONENT: At this time, again  
18 speaking in a personal capacity, it was -- I -- it  
19 was considered by me that there was potentially  
20 some apps that would be [REDACTED] 06:02:49

21 [REDACTED] that might be  
22 considered with exemptions.

23 But ultimately, I do not recall that  
24 happening. The integration partners set is -- is a  
25 separate process. This is referring to the public 06:03:12

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1 platform. 06:03:16

2 Q. (By Mr. Loeser) And so did Facebook give  
3 integration partners extensions or exceptions?

4 A. Inte- -- integration partners had access  
5 to private APIs and permissions on top of what the 06:03:27  
6 standard API offered regular developers. And that  
7 was considered access to continue, separate to the  
8 API changes that were being made for the public  
9 developer platform.

10 Q. And -- and other than integration 06:03:54  
11 partners, were there partners that -- that fell  
12 into that -- that category?

13 A. My understanding is that the -- the  
14 integration partners, the -- the apps that were  
15 intended to have longer term access to this 06:04:13  
16 information.

17 Q. Okay. And -- and Facebook's testimony is  
18 that there were not other types of partners that  
19 had longer term access to the publicly deprecated  
20 permission? 06:04:28

21 MR. BLUME: Object to form.

22 THE DEPONENT: My understanding is that  
23 outside of the integration partners only --  
24 ultimately, only temporary extensions were -- were  
25 granted. 06:04:43

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1 Q. (By Mr. Loeser) And integration partners 06:04:44  
2 weren't the only type of partners with private  
3 APIs, were they?

4 MR. BLUME: Objection. Scope and form.

5 THE DEPONENT: Yeah. I'm -- I'm not 06:04:55  
6 sure -- I'm not -- not sure what you mean.

7 Sorry. Can you ask a more precise  
8 question.

9 Q. (By Mr. Loeser) Well, you said -- you  
10 testified integration partners had access to 06:05:01  
11 private APIs and permissions.

12 And what did you mean by that?

13 A. So many of the -- many of the -- there  
14 were a number of developers that had integrations  
15 with the Facebook developer platform that were 06:05:37  
16 nonstandard, not things that public developers  
17 could build. To enable those integrations, they  
18 would have had some additional capabilities. And  
19 that -- those developers and those integrations  
20 were seen as separate to the deprecations of API v1 06:06:00  
21 and v2, and rollout to v2.

22 Q. Yeah. I just want to make sure the  
23 record is clear.

24 You said that integration partners had  
25 that -- went through that process. And I'm asking 06:06:15

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1 you are there other types of partners that had 06:06:18  
2 access to -- to private APIs that enabled something  
3 similar for them?

4 A. My understanding that integration  
5 partners refers to any partner at the limit who had 06:06:30  
6 some kind of private API access.

7 Q. If we go to page 3 of this string, back  
8 to your November 8th update -- I'm sorry. We're  
9 going to go to page 5 of the string. And we're  
10 moving back to an October 11th, 2013, update on 06:06:57  
11 "Platform Simplification."

12 There's a bullet here, "Dev Chakravarti  
13 joined the team as a data analyst - helped him ramp  
14 up on how to analyze the effects of PS12n on the  
15 whole ecosystem." 06:07:14

16 Explain who he is and what you asked him  
17 to do.

18 A. I do not recall Dev Chakravarti, and I do  
19 not recall what I asked him to do.

20 Q. I gather Facebook evaluated the effects 06:07:34  
21 of PS12 and on the whole ecosystem.

22 And for the record, PS12n is another way  
23 of describing the transition to Graph API  
24 version 2, right?

25 A. PS12n refers to platform simplification, 06:07:47

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1 which refers to the package of work that ultimately 06:07:49  
2 resulted in what was announced on April 30th, 2014,  
3 yes.

4 Q. Okay. So Facebook evaluated the effects  
5 of PS12n on the whole ecosystem? 06:08:01

6 MR. BLUME: Objection. Beyond the scope.  
7 And form.

8 THE DEPONENT: I can't confirm what did  
9 or did not happen. There's an email that says that  
10 I helped this person ramp up. But it doesn't 06:08:16  
11 confirm if any analysis or -- was done or what was  
12 found.

13 Q. (By Mr. Loeser) So if Facebook wanted to  
14 answer the question, "Did you analyze the effects  
15 of PS12n on the whole ecosystem," what would 06:08:29  
16 Facebook do to find an answer to that question?

17 MR. BLUME: Objection. Scope. Form.

18 THE DEPONENT: I would attempt to see if  
19 Dev Chakravarti was still at the company. And I  
20 would look for documents around this time that were 06:08:46  
21 analysis or -- or pertained to be analysis of the  
22 potential impacts of PS12n.

23 But you asked me a specific question as  
24 to whether or not he did an analysis, and I cannot  
25 confirm if he did any analysis. 06:09:06

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1 Q. (By Mr. Loeser) Okay. Going -- going 06:09:08

2 back to your answer right before that statement, to

3 prepare for your testimony today, did you ask

4 anyone whether Facebook analyzed the effects of

5 PS12 on the whole ecosystem? 06:09:21

6 A. I asked people as to if they recall

7 impact sizing being done. I didn't -- this --

8 your -- your specific question about the whole

9 ecosystem is a very specific one.

10 I spoke to people about their 06:09:38

11 recollections as to what analysis was done in

12 advance of the changes. And I reviewed several

13 documents that could be construed as impact

14 analysis.

15 MR. LOESER: Okay. Thank you. 06:09:53

16 And -- and I saw that in your notes and

17 we'll come -- we'll get to that in -- in a little

18 bit.

19 So thank you for that answer.

20 Let's go to the next exhibit which is a 06:10:01

21 new exhibit, which you'll see in a moment.

22 It's marked -- we're going to mark it

23 with a new number, 338.

24

25 ///// 06:10:29

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1 (Exhibit 338 was marked for 06:10:29  
2 identification by the court reporter and is  
3 attached hereto.)

4 Q. (By Mr. Loeser) And momentarily,  
5 Mr. Cross, you'll see an email from KP to 06:10:40  
6 Monica Mosseri, dated 12/10/2013. "Subject:  
7 Re: PS12n Criteria Review," with an attachment  
8 "Criteria for whitelist MWv1\_kp edits.pptx."

9 You let me know when you can see that.

10 A. Yeah, I see it. 06:11:10

11 Q. And you'll see that KP starts his email,  
12 "Hello Monica, This is awesome! Great framework."

13 Do you see that?

14 A. I do see that.

15 Q. And then he -- based on this, it appears 06:11:24  
16 that he reviewed slides that she prepared and  
17 provided some edits and comments; is that right?

18 A. That's a reasonable interpretation of  
19 what KP said.

20 Q. And if we move down this email string, 06:11:36  
21 you'll see at the beginning there's an email from  
22 Monica Mosseri to KP, dated December 10th, 2013,  
23 with the "Subject: PS12n Criteria Review."

24 Do you see that?

25 A. I do see that. 06:11:53

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1 Q. She writes, "Hey KP, I am in the final 06:11:54  
2 stages of the Whitelist Criteria Review (1a in  
3 Simon's graphic) and need your help. I can set up  
4 time over VC if that is easier let me know."

5 Did I read that correctly? 06:12:09

6 A. You read that correctly.

7 Q. So based on this, Monica Mosseri was  
8 involved in a whitelist criteria review as part of  
9 the introduction of PS12n or platform 3; is that  
10 right? 06:12:25

11 MR. BLUME: Objection. Form.

12 THE DEPONENT: It says what she was  
13 involved in here. I don't want to answer on behalf  
14 of the company. We should just read what she has.

15 Q. (By Mr. Loeser) Okay. And so Facebook 06:12:37  
16 did a whitelist criteria review as part of the  
17 introduction of platform 3.0?

18 A. I don't think it's appropriate to say  
19 Facebook did. Monica seems to have done a piece of  
20 work of that nature. But I don't recall what it 06:12:56  
21 is.

22 Q. And she worked for Facebook at the time,  
23 right?

24 A. She worked for Facebook at the time.

25 Q. So you've said a lot that -- something 06:13:09

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1 along the lines of "I'm not sure that Facebook did 06:13:12  
2 this. But this is what this person did."

3 Are you -- are you saying to me that when  
4 a Facebook employee engages in a project in  
5 connection with her work, that that's not something 06:13:21  
6 that Facebook did?

7 A. Perhaps I'm --

8 MR. BLUME: Objection to form.

9 THE DEPONENT: Perhaps I'm just  
10 misrepresenting how that question should be 06:13:35  
11 answered. My apologies.

12 Q. (By Mr. Loeser) Okay. And -- and I'm  
13 not -- I'm not trying to make you uncomfortable.  
14 I'm just -- I want to be clear that we're talking  
15 about a Facebook employee doing work for Facebook. 06:13:48

16 And you're not saying something other  
17 than that, right?

18 A. No, this is a Facebook employee --  
19 sorry, Rob. You were going to say something?

20 MR. BLUME: I was going to say, 06:13:57  
21 objection, to the extent it calls for a legal  
22 conclusion.

23 THE DEPONENT: Okay. Yeah, I -- I -- I  
24 can say that Monica was a Facebook employee and  
25 it -- it appears by this email that she's -- 06:14:07

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1 she's -- she's doing some work, and it would be 06:14:10  
2 reasonable to say it's in con- -- coherent with her  
3 duties.

4 Q. (By Mr. Loeser) And if you look at No. 1  
5 in her email, she writes, "Finalizing app 06:14:26  
6 categories and conversional apps to flag: in  
7 slide 7, I have gone ahead and highlighted the  
8 categories of apps that are controversial.

9 Controversial meaning there would be significant  
10 impact to us if they were" shut -- "if they were to 06:14:38  
11 shut down their integration in response to PS12n.  
12 Also controversial because they are trending and  
13 there is a strategic relationship with Zuck/mteam."

14 Did I -- did I read that accurately?

15 A. I think you read that accurately. 06:14:59

16 Q. So based upon this, it appears that a  
17 whitelist criteria review was done to determine  
18 which apps should be whitelisted, right?

19 A. No, that doesn't -- that's not a  
20 conclusion you can directly draw from this. 06:15:16

21 She's saying she's in the final stages of  
22 a whitelist criteria review. I don't know what --  
23 I don't recall what she meant by that. And it  
24 doesn't mean that necessarily apps were categorized  
25 against that criteria. I just don't know what this 06:15:35

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1 work was, sitting here today. 06:15:40

2 Q. So fair to say that a whitelist criteria  
3 review was a review of whitelist criteria?

4 MR. BLUME: Objection. Form.

5 THE DEPONENT: She's -- it's hard to know 06:15:54

6 what she means. She's in the final state -- she  
7 says here she's in the final stages of something.

8 But I -- again, I don't know what that means.

9 There was some process underway, but I'm -- I'm not  
10 aware, sitting here today, of what that was. 06:16:12

11 Q. (By Mr. Loeser) And -- and Mr. Cross,  
12 what relationship does the whitelist criteria  
13 review have to the work that KP referred as  
14 Jackie Chang's format for partnership positions?

15 MR. BLUME: Objection. Form. Scope. 06:16:33

16 THE DEPONENT: Sorry. Can you frame that  
17 a bit again? I'm not sure I make the connection  
18 you're making.

19 Q. (By Mr. Loeser) Sure.

20 We went through some email that discussed 06:16:44

21 Jackie Chang's recommendations regarding a format  
22 for how to treat different types of partners in the  
23 transition to the new platform. KP referred to  
24 that as Jackie's format.

25 And I'm asking you what the relationship 06:17:02

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1 is between that and this whitelist criteria review 06:17:05  
2 that is referenced here?

3 A. I don't know the relationship between  
4 those two things.

5 Q. So in this -- in her final stages of the 06:17:15  
6 whitelist criteria review, Ms. Mosseri indicates  
7 that she's gone ahead and highlighted the  
8 categories of apps that are controversial. And  
9 then she defines controversial here, "meaning there  
10 would be significant impact to us if they were shut 06:17:34  
11 down."

12 What is -- how -- how does Facebook  
13 define significant impact resulting from if  
14 partners or apps are shut down in response to the  
15 transition to PS12n? 06:17:50

16 MR. BLUME: Objection. Scope. And form.

17 THE DEPONENT: There's no standard  
18 definition at the company of what "significant  
19 impact" would mean.

20 Significant is subjective. And impact 06:18:01  
21 could mean many different things in many different  
22 contexts.

23 Oh, I can say in a -- in a personal  
24 capacity here, having been involved to some degree,  
25 is the types of things that would be considered 06:18:18

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1 here might be reputational concerns and platform -- 06:18:22  
2 like user significant -- user -- user experience  
3 concerns by developers removing integrations that  
4 users found valuable.

5 Q. (By Mr. Loeser) And any other -- 06:18:43  
6 anything else that Facebook would consider a  
7 significant impact to Facebook if particular apps  
8 were shut down as a result of the introduction of  
9 platform 3.0?

10 MR. BLUME: Objection. Scope. And form. 06:19:05

11 THE DEPONENT: Again, I don't feel I can  
12 answer on Facebook's behalf. There's no standard  
13 definition for significant. And there's no  
14 significant -- there's no standard definition  
15 for -- for impact. So I -- I -- I don't feel I can 06:19:17  
16 define that on Facebook's behalf.

17 Q. (By Mr. Loeser) Okay. But nonetheless,  
18 you gave one example, which was reputational  
19 concern.

20 That could be a significant impact for 06:19:29  
21 Facebook?

22 A. In my personal capacity, having worked on  
23 this stuff, that might be considered impact because  
24 of these changes.

25 I gave a second example as well, which is 06:19:41

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1 user experience changes as a result of the changes 06:19:46  
2 and how the API worked and the experiences that  
3 developers would be able to build.

4 Q. And then Ms. Mosseri also writes, "Also,  
5 controversial because they are trending and there 06:20:01  
6 is a strategic relationship with Zuck/mteam."

7 What -- what apps had a strategic  
8 relationship with -- and I suppose that's  
9 Mark Zuckerberg; is that a fair way to read that?

10 A. I think "Zuck" in this context would 06:20:14  
11 refer to -- to Mark Zuckerberg.

12 Q. And what does the M Team refer to?

13 A. M Team refers to Mark's leadership team.

14 Q. And do you know who's on that team -- who  
15 was on at this time? 06:20:27

16 A. I know some of the people that are on it  
17 at this time. But the -- the people on that team  
18 has changed over -- over the years, as you may  
19 expect.

20 Q. Okay. Who were some of the people that 06:20:37  
21 were on at this time?

22 A. On it at this time?

23 Q. Yeah.

24 A. Sorry.

25 I know who's on it -- I know some of the 06:20:44

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1 people on it today. But I'm not sure who would 06:20:47

2 have been on it at this time.

3 Q. Was -- was Sheryl Sandberg on the M Team  
4 at this time?

5 A. I cannot confirm. I do not -- I do not 06:21:02  
6 know whether or not Sheryl was on the M Team at  
7 this time.

8 Again, in a personal capacity, [REDACTED]  
9 [REDACTED] But I could not say

10 100 percent for certain [REDACTED] 06:21:12

11 Q. And what does it mean to Facebook for  
12 apps that have a "strategic relationship with  
13 Zuck/mteam"?

14 MR. BLUME: Objection. Form. Scope.

15 THE DEPONENT: I don't know what it means 06:21:28  
16 specifically to have a strategic relationship  
17 with -- with Zuck and M Team.

18 There's no company definition for -- for  
19 what that would mean. So I -- I cannot -- I don't  
20 feel I can accurately answer that question on 06:21:43  
21 behalf of the company.

22 Q. (By Mr. Loeser) And if you move down  
23 Ms. Mosseri's email a little bit under No. 2, it  
24 says "Loss/Decision Assessment: in slide 7 and 8,  
25 we need to access the loss for the top partners and 06:21:58

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1 determine whether we will grant them an exemption 06:22:00  
2 or extension."

3 So what does Facebook mean by top  
4 partners?

5 MR. BLUME: Objection. Scope. Form. 06:22:12

6 THE DEPONENT: I don't know what Face- --  
7 I don't know what Monica means by -- by top  
8 partners. That could mean a whole bunch of  
9 different things, depending on the context.

10 Q. (By Mr. Loeser) And the reference to 06:22:25  
11 exemptions or extensions, that -- that is with  
12 regard to the -- to changes that would occur with  
13 the introduction of platform 3.0?

14 A. Given the timeline of the -- of the  
15 email, I think it's reasonable to -- to -- to 06:22:39  
16 conclude that's what she meant.

17 But, again, as I've said multiple times  
18 here, I think the -- the frame of mind of the team  
19 in 2013, when the nature of the changes was still  
20 in flux and the expected exact -- exact -- exact 06:23:04  
21 set of changes and the way in they were rolled out  
22 drastically differed from what ultimately ended up  
23 happening.

24 So you're seeing a bunch of people here  
25 as -- as I mentioned before, attempting to -- to 06:23:22

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1 prepare for -- for something where the actuality 06:23:25  
2 was quite different.

3 Q. Okay. And so on that same No. 2,  
4 Ms. Mosseri writes -- and this is to KP -- "Can you  
5 help me assess the losses (rev and data)" -- "rev" 06:23:42  
6 refers to revenue there; is that right?

7 MR. BLUME: Objection. Form. Scope.

8 THE DEPONENT: I can't confirm what  
9 revenue means in this context.

10 Q. (By Mr. Loeser) Okay. Well, let's just 06:23:57  
11 read it into the record.

12 "Can you help me assess the losses (rev  
13 and data) and whether we will make an  
14 exemption/extension for the following apps?"

15 And then the following apps it appears 06:24:09  
16 are [REDACTED] is what's shown on here; is  
17 that -- did I read that correctly?

18 A. The formatting is a little messed up. So  
19 it's not 100 percent clear that that's -- that --  
20 that's what naturally follows. But it's not 06:24:24  
21 unreasonable to -- to think that's the case.

22 Q. Okay. And so it looks like Ms. Mosseri  
23 was asking KP if he can help her assess the losses  
24 and -- whether Facebook will make an exemption or  
25 extension for particular apps. 06:24:40

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1                   And this, again, is in connection with                   06:24:42  
2                   the implementation of platform 3.0, right?  
3                   MR. BLUME: Objection. Form. Scope.  
4                   THE DEPONENT: I can't confirm exactly  
5                   what these folks meant. We should speak to them.                   06:24:53  
6                   But it looks like that's the discussion they're  
7                   having given the subject of the email.  
8                   MR. LOESER: Let's go to the next  
9                   exhibit, which is the slide deck that -- that  
10                  Ms. Mosseri sent to KP, attached to the email that                   06:25:12  
11                  we just went through on December 10th, 2013. And  
12                  this will be another new exhibit.  
13                  (Exhibit 339 was marked for  
14                  identification by the court reporter and is  
15                  attached hereto.)                   06:25:27  
16                  Q. (By Mr. Loeser) And I represent to you,  
17                  Mr. Cross, that this is the attachment to  
18                  Ms. Mosseri's email.  
19                  And you'll remember in KP's response he  
20                  indicated that he made some notes and provided some                   06:25:56  
21                  comments on her slide deck.  
22                  Do you recall that?  
23                  A. Yes, I do.  
24                  Q. Okay. So if we go to the -- it looks  
25                  like the seventh slide, and then go to the next                   06:26:14

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1 page. The -- the notes are not visible -- visible 06:26:20

2 on the view that we're looking at.

3 I will note for the record that the

4 version that we're introducing as an exhibit has

5 notes in -- in the document that appear to be the 06:26:35

6 notes that -- that KP made on the slide deck.

7 We can put this exhibit aside. We're

8 going to go to another version of this deck.

9 Let's -- actually, before we do that, go

10 to the first page of the deck. 06:26:48

11 Do you see the title of this slide deck,

12 Mr. Cross?

13 A. I do.

14 Q. And could you read that title for the

15 record. 06:27:05

16 A. "Criteria for granting Exemptions and

17 Extensions."

18 Q. And the date of this document is 12/5/13;

19 is that right?

20 A. I assume that's the American format, 06:27:18

21 so...

22 Q. Fair -- fair point.

23 I interpret that as December 5th, 2013;

24 is that how you interpret it as well?

25 A. Annoyingly, yes, it is, how I interpret 06:27:30

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1 it. 06:27:33

2 Q. And -- and the author is Monica Mosseri;  
3 is that right?

4 A. It is. And the critical piece of  
5 information on this is the word "Draft." 06:27:39

6 MR. LOESER: Right. Right.

7 Okay. So let's go -- you can put that  
8 exhibit aside and we're going to go to another  
9 version of this presentation.

10 This will be marked as Exhibit 340. 06:27:50

11 (Exhibit 340 was marked for  
12 identification by the court reporter and is  
13 attached hereto.)

14 MR. LOESER: And when you -- when it  
15 comes up, we'll look at the first page of this 06:28:17  
16 slide deck as well.

17 Q. (By Mr. Loeser) And fair to say that  
18 this is another -- this also is a slide deck, and  
19 if you could read the title into the record.

20 A. "Criteria for granting Exemptions and 06:28:44  
21 Extensions, Draft, 12/5/13".

22 Q. Okay. And if we could go back to the  
23 metadata.

24 So I'll -- I'll state for the record that  
25 this was a version of this document that was also 06:29:06

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1 produced by Facebook. And -- and this is the 06:29:09  
2 metadata associated -- metadata associated with  
3 that document. We can move on to the document  
4 itself.

5 So let's go to the -- the second -- 06:29:28  
6 the -- it looks like the second slide in the -- in  
7 the deck which has the heading decision -- well --  
8 yeah, let's look at this agenda. This is page 2 of  
9 the deck, I believe.

10 And you see there's "Agenda," and it says 06:29:47  
11 "Decision Buckets," right?

12 A. Yeah.

13 Q. And then there's a list of different  
14 categories of apps, right, "Non-Games, Games,  
15 PMD's, Mobile/TV/Devices"? 06:29:59

16 A. I see.

17 Q. And what -- what are PMDs?

18 A. PMDs, I think, refers to page management  
19 developers. I'm not 100 percent sure of that -- of  
20 the acronym. 06:30:20

21 Q. So the first item on the agenda is  
22 "Decision Buckets"; is that right?

23 A. That's the first item on the agenda.

24 Q. Okay. And if we go to the next page of  
25 the slide deck, you see there's a slide that says 06:30:32

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1 "Decisions Buckets." 06:30:37

2 Do you see that?

3 A. I see that.

4 Q. And, again, this is a presentation on the

5 criteria for granting exemptions and extensions, 06:30:42

6 right?

7 A. No. This is a proposed -- a set of

8 proposals for potentially how to think about this.

9 Q. Okay. So under the "Decision Buckets"

10 listed in this slide, in this presentation on the 06:31:05

11 criteria for granting exemptions and extensions,

12 the first bucket is "Exemption."

13 Do you see that?

14 A. I do see that.

15 Q. And why don't you read for the record 06:31:16

16 what -- how that bucket is described.

17 A. On the document it says "Strategic value

18 for both companies long term."

19 Q. Okay. And then let's look at the second

20 bucket identified. 06:31:29

21 That's "Extension"; is that right?

22 A. That's correct.

23 Q. And why don't you read for the record

24 what that -- how that bucket is described.

25 A. "Contract with backward capability clause 06:31:38

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1 Company that cannot move quickly and what length" 06:31:42

2 of "extension and what capabilities."

3 Q. And the third bucket identified here is

4 "Standard"; is that right?

5 A. That's what's on the slide. 06:31:53

6 Q. Okay. And what's the descriptions of

7 that bucket?

8 A. "No access to private capabilities."

9 Q. So if we go back to the "Agenda" slide.

10 Again, after the "Decision Buckets," 06:32:10

11 there are these -- these four categories.

12 The first "Non-Games." The second,

13 "Games." The third "PMD's." And the fourth

14 "Mobile/TV/Devices"; is that right?

15 A. That's right. 06:32:31

16 Q. Okay. So now let's go to the fourth page

17 of the presentation and you see the cover slide,

18 "Non Games."

19 A. Yup.

20 Q. Waiting for it here. "Non Games." There 06:32:50

21 it is.

22 And then the slide that comes after that

23 is a description of apps that are within the

24 "Non Games" category, and there's more detail on

25 those different apps. 06:33:11

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1           If you look at that slide, it's captioned           06:33:13  
2       "Categories of apps and impact."  
3           Is that a fair read of this presentation,  
4       that there's a title slide that says "Non Games,"  
5       and the next page has more detailed information.           06:33:20  
6           Would you read that to -- for -- for  
7       the -- the next slide to be related to the title  
8       slide?  
9       A.    I think that's a fair read, yes.  
10       Q.   And are all of these apps identified here           06:33:31  
11       nongames?  
12       A.    I would --  
13       MR. BLUME:  Objection.  Form.  
14       THE DEPONENT:  -- consider all of the  
15       categories listed here as nongames.           06:33:41  
16       Q.    (By Mr. Loeser)  And then within this  
17       category of nongames, you'll see that the slide has  
18       a category, "Sub Categories that require further  
19       assessment."  
20       Do you see that?           06:33:55  
21       A.    I do.  
22       Q.    And there are five different  
23       subcategories that are identified; is that right?  
24       A.    I do.  
25       Q.    And they are -- "Social network           06:34:06

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2	A. Yeah.
---	----------

5 | A. Correct. 06:34:17

8	A. Correct.
---	-------------

9            0.    "TV" is the fourth, correct?

11 Q. And what's the fifth one identified  
12 there?

13           A.     The word on the slide is "Strategic."

16 And can you read for the record what the  
17 title of this slide is.

18           A.    The title of the slide is "What do we  
19    have to lose?"

23           A.    It's in a slide which is a draft of how  
24   to think about that potentially.

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1 on here. 06:35:13

2 The first one is "Revenue"; is that  
3 right?

4 A. That's what's on the slide.

5 Q. And then what are the questions asked in 06:35:18  
6 connection with "Revenue"?

7 A. "Big Neko spenders?" [REDACTED]

8 [REDACTED]

9 Q. Okay. And what are -- what is Neko?

10 A. Neko is the code name for mobile app 06:35:31  
11 install ads.

12 Q. So one of the questions being asked on  
13 "What do we have to lose?" is whether -- whether  
14 revenue would be lost by -- by big Neko spenders;  
15 is that -- that right? 06:35:45

16 MR. BLUME: Objection. Form. Scope.

17 THE DEPONENT: What's on the slide is --  
18 is "Big Neko spenders" is under the heading "What  
19 do we have to lose?"

20 Q. (By Mr. Loeser) For revenue, right? 06:35:59

21 A. It's next to "Revenue" on the slide.

22 Q. Okay. And the next item there is "[REDACTED]"  
23 [REDACTED] And that's also a  
24 question related to what do we have to lose with  
25 regard to revenue; is that right? 06:36:13

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1 MR. BLUME: Objection. Form. 06:36:15

2 THE DEPONENT: It's a question, as  
3 written on the slide.

4 Q. (By Mr. Loeser) Question relating to  
5 "What do we have to lose?" related to revenue, 06:36:22  
6 right?

7 MR. BLUME: Same objection.

8 THE DEPONENT: I mean, if -- if I'm just  
9 reading a slide now.

10 Q. (By Mr. Loeser) Well, actually, you're 06:36:34  
11 testifying on behalf of Facebook.

12 So did Facebook consider the -- the loss  
13 that would relate to revenue because of big Neko  
14 spenders?

15 MR. BLUME: Objection. Form. And scope. 06:36:48

16 THE DEPONENT: So the slide here  
17 indicates that when thinking about the potential  
18 impact of these changes, along with several other  
19 accesses, it was a question being asked.

20 Q. (By Mr. Loeser) Okay. And another 06:37:05  
21 question being asked in that context was "Will  
22 access to graph increase spend?"; is that right?

23 MR. BLUME: Objection. Form. And scope.

24 THE DEPONENT: The slide suggests that  
25 the author was asking that question. 06:37:16

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1 Q. (By Mr. Loeser) The author is a person 06:37:19  
2 who works for Facebook, who developed a PowerPoint  
3 called "Criteria for granting Exemptions and  
4 Extensions," right?

5 THE COURT REPORTER: Wait. Mr. Blume, 06:37:29  
6 you were muffled. What --

7 MR. BLUME: Sorry. I -- my objection was  
8 asked and answered.

9 Q. (By Mr. Loeser) You can answer,  
10 Mr. Cross. 06:37:43

11 A. This is a slide deck with that title,  
12 with this slide on it, produced by an employee of  
13 Facebook.

14 Q. (By Mr. Loeser) And then if we move down  
15 the -- the column on "What do we have to lose," the 06:37:56  
16 second item is "Visibility/Influence."

17 Do you see that?

18 A. I do see that.

19 Q. And what were the questions that Facebook  
20 posed with regard to visibility and influence? 06:38:10

21 MR. BLUME: Objection. Form. Scope.

22 THE DEPONENT: What's on the slide  
23 written by Monica is "Risk of bad press?" And "Is  
24 there user value and will they be upset?"

25 Q. (By Mr. Loeser) And so the risk of bad 06:38:26

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1 press, in the context of this transition to the new 06:38:29  
2 platform, why would there be a risk of bad press  
3 relating to that transition in which certain  
4 permissions were deprecated?

5 MR. BLUME: Objection. Form. And scope. 06:38:43

6 THE DEPONENT: It's hard to answer that  
7 on behalf of the company.

8 But what I can say in a personal  
9 capacity, having worked in this area, is that the  
10 changes that were being proposed at the time would 06:38:55  
11 have had an impact on several -- many applications  
12 built on the Facebook developer platform, and there  
13 was a concern that they might be vocal about their  
14 displeasure.

15 Q. (By Mr. Loeser) And now the next item is 06:39:13  
16 "Users/Engagement," and the question is "Will they  
17 remove login resulting in a MAU drop?"

18 Tell me what that means.

19 MR. BLUME: Objection. Form. Scope.

20 THE DEPONENT: Well, what they mean is -- 06:39:29  
21 by remove login is that the -- an app might choose  
22 to remove a Facebook login integration, and that  
23 might result in a monthly activity user drop.

24 Q. (By Mr. Loeser) And so you're -- what  
25 this is suggesting is that because of the changes 06:39:48

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1 to the platform, an app may decide not to 06:39:50  
2 participate on the platform anymore causing a drop  
3 in monthly average users of the platform; is that  
4 right?

5 MR. BLUME: Objection. Form and scope. 06:40:02

6 THE DEPONENT: This is -- MAU is monthly  
7 active, rather than average users.

8 One of the -- one of the concerns  
9 discussed at the time is that these changes might  
10 require developers to deprecate or that developers 06:40:20  
11 would choose to deprecate their applications and,  
12 therefore, no longer participate in the Facebook  
13 developer platform resulting in worse outcomes for  
14 users.

15 Q. (By Mr. Loeser) And why does Facebook 06:40:35  
16 care about monthly active users?

17 MR. BLUME: Objection. Beyond the scope.

18 THE DEPONENT: Yeah. I -- this is beyond  
19 the scope of like what I've been prepared to  
20 testify on. 06:40:47

21 Sorry. I don't feel I can answer that  
22 question.

23 Q. (By Mr. Loeser) So in connection with  
24 the -- the impact of the transition to the new  
25 platform, Facebook is not prepared to testify about 06:40:59

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1 why it cares about an impact relating to a drop in 06:41:02

2 monthly active users?

3 MR. BLUME: Objection to form. And

4 scope.

5 THE DEPONENT: It's unclear what MAU 06:41:12

6 means in this context. It could be -- MAU is a

7 metrics used to define many different things at

8 Facebook.

9 Q. (By Mr. Loeser) All related to monthly  
10 active users, right? 06:41:25

11 A. In different context, though. There are  
12 different products that calculate monthly active  
13 users for their product.

14 Q. Okay. So looking at the next item on  
15 here, it says "Data Exchange." 06:41:38

16 Do you see -- see that?

17 A. I do.

18 Q. What does data exchange mean for  
19 Facebook?

20 MR. BLUME: Objection. Form. And scope. 06:41:48

21 THE DEPONENT: I can't answer what does  
22 data exchange mean for Facebook, in general. That  
23 would be beyond the scope.

24 Well, I can say there in this context --  
25 again, given my personal experience -- is one of 06:42:01

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1 the benefits of the Facebook developer platform was 06:42:05  
2 that users would share their activity in apps back  
3 to Facebook. And that was seen as a good thing  
4 because it would be more content on their timeline  
5 and in newsfeed for their friends. 06:42:22

6 Q. (By Mr. Loeser) And the data was also  
7 beneficial for Facebook's business, right?

8 MR. BLUME: Objection. Form. And beyond  
9 the scope.

10 THE DEPONENT: I'm not able to answer the 06:42:35  
11 question on -- on the business, on the advertising  
12 side. That's not my area of expertise.

13 Again, what I can say is that one of the  
14 values of the Facebook developer platform is that  
15 information about users' activity and apps, users 06:42:52  
16 would decide to share that back to Facebook, and  
17 that would be content on their timeline, in their  
18 newsfeed.

19 And that would be a reason for their  
20 friends to come back and look at newsfeed. So good 06:43:04  
21 for -- good for users and ultimately good for  
22 Facebook.

23 Q. (By Mr. Loeser) Okay. And so the  
24 question being asked with regard to "Data Exchange"  
25 is "Will we lose access to OG data?" 06:43:16

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1 mechanism for a user to tag their friend in a 06:44:32  
2 story. But in this case, it's about a user  
3 choosing to share activity in their -- in an app  
4 with their friends on Facebook. And that's --  
5 that's specifically what this is referring to, in 06:44:46  
6 my understanding.

7 Q. (By Mr. Loeser) Okay. And then the next  
8 question is "Do certain products depend on this  
9 data?"

10 What -- what data is this referring to? 06:44:52

11 A. I'm not sure exactly what data is -- is  
12 this data. I'm inferring that it means OG data.

13 But, you know, that -- that's -- that's  
14 my inference. It's not entirely clear from this  
15 slide what -- what this data means. 06:45:13

16 Q. So Ms. Mosseri -- Mosseri -- or Mosseri  
17 here was evaluating -- when answering the question  
18 "What do we have to lose," one of the categories  
19 she identified was data exchange, right?

20 MR. BLUME: Objection. Form. 06:45:26

21 THE DEPONENT: Data exchange is on -- on  
22 the slide.

23 Q. (By Mr. Loeser) So let's go to the next  
24 page of the slide.

25 Do you see that the header or the title 06:45:42

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1 of that slide is "Loss Assessment"? 06:45:46

2 A. I do.

3 Q. So based on this slide, it appears that  
4 Facebook did a loss assessment using the different  
5 categories of apps that were earlier identified in 06:46:00  
6 this presentation; is that right?

7 MR. BLUME: Objection. Form. And scope.

8 THE DEPONENT: I mean, it's hard to --  
9 it's hard to read this slide.

10 The title "Loss Assessment" is there, but 06:46:12  
11 everything else is -- is kind of squiffy.

12 Q. (By Mr. Loeser) Okay. So if you go back  
13 to the slide, "Categories of apps and impact" --  
14 and -- and I can clarify this with -- with some  
15 questions. I can see why you were confused. 06:46:28

16 The subcategories that required further  
17 assessment were "Social Network Influencing, Media  
18 Aggregators, Social Apps, TV" and "Strategic"; is  
19 that right?

20 A. That's what I see on the slide, yeah. 06:46:41

21 Q. Okay. So now when you go forward to the  
22 "Loss assessment" slide, the categories of apps for  
23 which there was further assessment were "Media  
24 Aggregator, Social Network Influencing, Social  
25 Apps, TV" and "Other strategic." 06:46:50

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1 Do you see that? 06:46:54

2 A. That's what I see on the slide.

3 Q. Okay. So this is a further loss

4 assessment pertaining to those specific categories

5 that were subcategories of the nongames category. 06:47:03

6 Do I have that right?

7 MR. BLUME: Objection. Form. And scope.

8 THE DEPONENT: I -- I think you -- I

9 think you probably have these right. These are --

10 these are five categories that are mentioned on the 06:47:18

11 previous slide.

12 Q. (By Mr. Loeser) Okay. And then if you

13 look at the "Loss assessment," it's broken down

14 into four different categories. And they are

15 "Revenue, Visibility Influence, Users/Engagement" 06:47:28

16 and "Data Exchange."

17 Do you see that?

18 A. I do see that.

19 Q. And those were the four different

20 categories that was identified on the slide "What 06:47:39

21 do we have to lose"; is that right?

22 A. That matches the previous slide.

23 Q. So let's look down the other strategic

24 column of this loss assessment. And if you look at

25 the -- across from the "Revenue (Q4 '13)" line -- 06:47:59

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1 do you see that in the middle of the page, "Revenue 06:48:04

2 (Q4 '13)"?

3 A. I see it in the middle of the page, yeah.

4 Q. And so for the purpose of this analysis,

5 Facebook was able to identify the revenue for 06:48:14

6 specific apps that were taken into account when

7 evaluating loss assessment rating -- relating to

8 revenue for Q4 '13; is that right?

9 MR. BLUME: Objection. Form. And scope.

10 THE DEPONENT: I -- I am not -- I 06:48:37

11 can see -- I can see on the slide, but --

12 discussing exactly how revenue was calculated or --

13 is -- is not something I've been prepared to

14 testify about -- I'm prepared to testify about.

15 Q. (By Mr. Loeser) Okay. So one of the 06:48:54

16 topics here was the revenue impact of -- of

17 whitelisting, for example, right?

18 A. I think that -- I think that's right,

19 yes.

20 Q. And so this is a slide that -- that shows 06:49:11

21 that Facebook evaluated loss assessment, and one of

22 the categories of loss assessment that was

23 evaluated was revenue, right?

24 MR. BLUME: Objection. Form. And scope.

25 THE DEPONENT: Again, in this slide deck 06:49:30

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4 Q. (By Mr. Loeser) And so it appears from  
5 this slide deck that when considering the other 06:49:50  
6 strategic partners, and these other subcategories,  
7 and the impact of the transition to the new  
8 platform, Facebook was able to evaluate the revenue  
9 associated with other strategic partners; is that  
10 right? 06:50:08

13 THE DEPONENT: Yeah. As I say, I think  
14 it's beyond the scope of what I've been prepared to  
15 testify on. 06:50:19

18           A.     From looking at the slide here, there is  
19       some revenue numbers for some developers and  
20       partners, but it's unclear to me exactly what                      06:50:37  
21       that -- what -- where that -- where that data came  
22       from or exactly what it refers to. But there's  
23       some revenue numbers on the slide.

24 Q. So the revenue numbers on the slide

25 include -- and you tell me if I'm reading the slide 06:50:51

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1 wrong -- but for Q4 '13, so fourth quarter of 2013, 06:50:55  
2 eBay has \$639,342 of revenue. That was revenue for  
3 Facebook.

4 Is that -- is that a fair way to read  
5 this slide? 06:51:11

6 MR. BLUME: Objection. Form. And scope.

7 THE DEPONENT: I can't confirm exactly  
8 what was meant by the author. But I'm reading that  
9 there is those numbers on the slide, yes.

10 Q. (By Mr. Loeser) So based upon this 06:51:26  
11 slide, it appears that Facebook evaluated the  
12 revenue paid by certain partners when looking at  
13 the impact of the introduction of the new platform  
14 would have on those partners if they were to stop  
15 using the platform? 06:51:40

16 MR. BLUME: Objection to form.

17 Q. (By Mr. Loeser) Do you think that's --

18 MR. BLUME: Sorry.

19 THE DEPONENT: No.

20 MR. BLUME: Hold on. Did you finish your 06:51:49  
21 question, Derek?

22 MR. LOESER: Yes.

23 MR. BLUME: Oh, then objection. Form.  
24 And scope.

25 THE DEPONENT: So my understanding of -- 06:52:04

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1 of reading this is that there is some data on 06:52:06  
2 revenue from some partners, but it's not clear to  
3 me that this is directly related to whether or not  
4 they would stop using the platform.

5 It indicates that they -- again, seeing 06:52:27  
6 what I see on the slide -- that that was the  
7 revenue in the quarter. It does not make a  
8 specific connection to whether or not they would be  
9 impacted by the changes and how.

10 Q. (By Mr. Loeser) But does Facebook track 06:52:44  
11 the revenue of -- that it receives from its  
12 strategic partners?

13 MR. BLUME: Form. Scope.

14 THE DEPONENT: I'm not well up on the  
15 advertising side of Facebook's business. And I 06:53:03  
16 haven't worked in the strategic partnership team  
17 for a long time. So I don't feel I can clearly  
18 answer that question.

19 Q. (By Mr. Loeser) So where would Facebook  
20 go if it wanted to answer the question of the 06:53:16  
21 amount of revenue paid to Facebook in the Q -- in  
22 Q4 '13 for Amazon, Apple, Spotify, Bing, Windows,  
23 Skype, eBay and Ticketmaster?

24 MR. BLUME: Objection. Form. And scope.

25 THE DEPONENT: I would probably go and 06:53:33

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1 ask someone on the advertising side of the 06:53:35  
2 business.

3 Q. (By Mr. Loeser) And if Facebook wanted  
4 to evaluate the loss of revenue to Facebook, if all  
5 of the partners I just listed stopped using the 06:53:46  
6 platform, how would Facebook do that?

7 MR. BLUME: Objection. Form. And scope.

8 THE DEPONENT: I'm -- I'm not sure --  
9 I -- I -- I don't know. I'm not an expert in  
10 analyzing spend and what the impact is. 06:54:01

11 Remember, the -- we're talking here about  
12 a bunch of platform changes. Revenue could come  
13 from -- from a number of different reasons. This  
14 revenue is not necessarily directly connected to  
15 their integration. 06:54:22

16 So I -- I actually -- again, I don't  
17 know -- and I want to be clear -- I'd be  
18 speculating. I -- I do not know. And I -- I'm not  
19 an expert in how you would assess the potential  
20 loss in revenue if the integrations were stopped. 06:54:37

21 Q. (By Mr. Loeser) So fair to say when  
22 Ms. Mosseri was evaluating "What do we have to  
23 lose," one of the topics that she evaluated was  
24 revenue, right?

25 MR. BLUME: Objection. Asked and 06:54:52

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1 answered. 06:54:52

2 THE DEPONENT: I feel like I've answered  
3 that question.

4 Q. (By Mr. Loeser) So that's a "yes"?

5 A. I feel like I've answered that question. 06:55:02

6 MR. BLUME: You can answer.

7 Q. (By Mr. Loeser) You can answer.

8 MR. BLUME: You -- you can answer again,  
9 Simon, if you remember.

10 THE DEPONENT: Okay. Revenue -- there 06:55:09

11 are -- there are some revenue stats on here, but  
12 it's not necessarily making a connection with --  
13 with impact. It's just -- my understanding is  
14 this is -- this is statements of revenue in a  
15 quarter by these companies and that's it. 06:55:27

16 Q. (By Mr. Loeser) Okay. On a page with  
17 the title "Loss assessment"; is that right?

18 A. The numbers are on a page with the title  
19 "Loss assessment." But that doesn't mean that  
20 this would be the loss if -- this would be an 06:55:41  
21 assessed loss based on the proposed changes.

22 Q. Fair to say, however, that Ms. Mosseri  
23 was identifying the revenue received from certain  
24 partners in connection with her evaluation of  
25 potential losses that Facebook would experience as 06:55:59

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1 a result of the transition? 06:56:01

2 MR. BLUME: Objection. Form. And scope.

3 THE DEPONENT: Again, reading -- reading

4 from the slide here, there's a slide with "Loss

5 assessment" in the title, and there are some 06:56:14

6 revenue numbers, very small number of companies.

7 Q. (By Mr. Loeser) And fair to say if -- if

8 Facebook could identify those revenue numbers for

9 eBay and Spotify, it could also identify them for

10 all of its other strategic partners? 06:56:30

11 MR. BLUME: Objection. Form. Scope.

12 THE DEPONENT: I do not know how -- I --

13 I do not know if that's possible. It's -- as we've

14 discussed previously, definition of strategic

15 partner is not like clearly defined and/or 06:56:45

16 universal.

17 And I'm not an expert and would not know

18 and was not -- did not prepare to answer questions

19 on how revenue would be assessed for a given

20 company. It's -- it's not something I know how to 06:57:10

21 do.

22 Q. (By Mr. Loeser) You can't answer the

23 question, but it's an answerable question by

24 Facebook, right?

25 MR. BLUME: Objection. Form. Scope. 06:57:20

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1 THE DEPONENT: It's -- it -- again, it's 06:57:24  
2 potentially an answerable question by Facebook.  
3 But I'd be speculating. As I say, I -- I am not  
4 aware of how this would be done.

5 Q. (By Mr. Loeser) So let's move to the 06:57:38  
6 next type of loss that -- that was identified here,  
7 and it's "Visibility" and "Influence."  
8 Do you see -- see that?

9 A. I see that.

10 Q. And you'll see for the "Other Strategic" 06:57:49  
11 category of partners, it notes "High"?  
12 A. It seems to note "High," yes.

13 Q. And so what does that indicate with  
14 regard to those partners?

15 MR. BLUME: Objection. Scope. 06:58:05

16 THE DEPONENT: Impossible for me to say  
17 here from the company's perspective. This is a  
18 slide deck written by somebody. There's no  
19 criteria defined for visibility and influence or  
20 what high, medium or low would be in that context. 06:58:22  
21 I think if you want to know that --

22 Q. (By Mr. Loeser) Do you --  
23 A. -- it might be worth asking Monica.

24 Q. Sorry. I don't mean to talk at the same  
25 time. 06:58:31

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1 A. Sorry. 06:58:32

2 Q. Does Amazon have a high visibility and  
3 influence with -- with Facebook?

4 MR. BLUME: Objection. Form. Scope.

5 THE DEPONENT: I don't -- I -- I -- I 06:58:48

6 couldn't answer on the company's perspective about

7 like whether or not Amazon has -- has influence.

8 It's -- it's certainly a large organization. But

9 assessing its influence within Facebook is not

10 something I could testify to. 06:59:06

11 Q. (By Mr. Loeser) Okay. And then if we go  
12 to the next category "Users/Engagement."

13 Do you see that?

14 A. I do see that.

15 Q. And you'll see that for each of these 06:59:15

16 subcategories there's a monthly active user number.

17 Do you see that?

18 MR. BLUME: Objection. Form.

19 THE DEPONENT: I do.

20 Q. (By Mr. Loeser) And the highest monthly 06:59:23

21 active user category in here is to "Other

22 Strategic"; is that right?

23 A. Of the five listed here, that's the

24 largest number.

25 Q. And "Other Strategic," it shows that 06:59:33

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1 65,996,118 monthly active users. 06:59:36

2 So what does that mean with regard to the  
3 "Other Strategic" category?

4 MR. BLUME: Objection. Form. And beyond  
5 the scope. 06:59:49

6 THE DEPONENT: So in -- and this is one  
7 of the things I was referring to earlier.

8 Different products measure their own MAU.  
9 My understanding is in this context it refers to  
10 whether or not the Facebook platform apps 07:00:06  
11 associated with these entities and how many people  
12 were actively using those Facebook platform apps.

13 Q. (By Mr. Loeser) And -- so if Facebook  
14 wanted to isolate and identify the monthly active  
15 users for all partners apps that were whitelisted 07:00:29  
16 for the time period they were whitelisted, is that  
17 something Facebook could do?

18 A. Can you help me understand, monthly  
19 active users in what context?

20 Q. In -- in the context that you just used 07:00:47  
21 when answering my prior question.

22 A. So whether or not the app IDs that were  
23 associated with these entities, what their monthly  
24 active user based off the application was?

25 Q. Right. 07:01:02

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1           A.    And help me understand -- remind for me                           07:01:03  
2   the rest of your question so I can make sure I  
3   answer it as accurate as I can.

4           Q.    Sure.  I -- it's really -- it's a  
5   question about Facebook's ability to track its --                           07:01:10  
6   its users.

7                   And so can Facebook identify monthly  
8   active users for all partner apps that were  
9   whitelisted?

10               MR. BLUME:  Objection.  Form.                               07:01:32

11           Q.    (By Mr. Loeser)  For the time period that  
12   they were whitelisted?

13           A.    I don't know if Facebook can -- can  
14   determine that.  The answer is relatively hard to  
15   compute, as I understand it and would -- would --                       07:01:45  
16   would depend on data retention policies.

17                   I do not know whether or not that's an  
18   answerable question.

19           Q.    Okay.  And what about if Facebook wanted  
20   to isolate revenue from all partners that were                           07:02:00  
21   whitelisted for the time period that they were  
22   whitelisted; is that something Facebook can do?

23           A.    Again, I don't know if that's something  
24   that Facebook could do.

25           Q.    And where would Facebook go to answer the                   07:02:14

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1 question of whether it could do that? 07:02:16

2 MR. BLUME: Objection. Form.

3 THE DEPONENT: I would have to -- I -- I

4 don't know. I would have to speak to the folks on

5 the platform team to see if they knew if they could 07:02:33

6 provide some of the information.

7 And I think the -- the sales and

8 marketing and advertising part of the business

9 would -- somebody there would -- would be able to

10 answer whether or not that was answerable. 07:02:50

11 Q. (By Mr. Loeser) So let's look at the

12 last category of -- of -- of what Facebook has to

13 lose in the transition to the new platform, and

14 that's "Data Exchange."

15 And, again, under the "Other Strategic" 07:03:06

16 column, it lists a number of -- of apps. It says

17 "Bing/Win" -- which I assume is Windows -- "Skype:

18 Maps, Search, Video Message, Ticketmaster: Events

19 data."

20 What is that -- explain to what data 07:03:24

21 exchange occurs with regard to those particular

22 apps.

23 MR. BLUME: Objection. Form. And scope.

24 THE DEPONENT: I'm not able to answer

25 the apps with -- with that specificity. That would 07:03:35

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1 require me to know the details of those 07:03:40  
2 integrations a long time in the past.

3 So I'm -- I'm not able to -- to  
4 explain -- to answer the question as -- as to  
5 exactly what data -- how those integrations 07:03:51  
6 functioned.

7 Q. (By Mr. Loeser) And can you answer more  
8 broadly, or do you have anything other than what  
9 you've already said about data exchange to -- to  
10 say with regard to why it was taken into account 07:04:02  
11 when evaluating what Facebook has to lose in the  
12 transition to the new platform?

13 MR. BLUME: Objection. Form. And beyond  
14 the scope.

15 THE DEPONENT: Related to these, I -- 07:04:13  
16 I -- I -- I couldn't give a specific answer.

17 We talked about a previous category here  
18 which is apps that people used that allowed them to  
19 share their activity back to their friends on  
20 Facebook, and that being a form of data exchange 07:04:30  
21 that was the core -- one of the core value  
22 propositions of the Facebook developer platform for  
23 users and for developers.

24 MR. LOESER: We can move on to a new  
25 exhibit. 07:04:48

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1 MR. BLUME: Is this a -- is this a good 07:04:50  
2 time for a break, Derek?

3 THE DEPONENT: Yeah, I would love a  
4 break, if that's all right. A bio break.

5 MR. LOESER: Sure. Absolutely. 07:04:58

6 SPECIAL MASTER GARRIE: How long -- how  
7 long of a break are we talking about, Counsel?  
8 Maybe 20 -- how long do you need Mr. Cross? Do you  
9 want to grab dinner?

10 THE DEPONENT: Well, what time are we 07:05:06  
11 planning to go to? I have on my calendar until I  
12 think --

13 SPECIAL MASTER GARRIE: These people --  
14 oh, let's go off the -- off the record.

15 THE DEPONENT: Okay. 07:05:14

16 THE VIDEOGRAPHER: Okay. We're off the  
17 record at 7:05 p.m.

18 (Recess taken.)

19 THE VIDEOGRAPHER: We are back on the  
20 record at 7:39 p.m. 07:39:07

21 MR. LOESER: Okay. Mr. Cross, we're  
22 going to introduce a new exhibit which will be  
23 marked Exhibit 341.

24 (Exhibit 341 was marked for  
25 identification by the court reporter and is 07:39:16

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1 attached hereto.) 07:39:16

2 MR. LOESER: And so you should be looking  
3 at now a document that has the header "Deprecated  
4 f8 2014 Partnerships/Ops XFN."

5 Do you see that? 07:39:51

6 A. Yeah, I see that.

7 Q. And what does the title of that document  
8 refer to?

9 A. I can't be 100 percent sure. But reading  
10 the document, it seems to refer to a -- a Facebook 07:40:09  
11 group or a Workplace group. Some -- some kind of  
12 internal message board. It's -- it's hard to read  
13 the exact structure.

14 Q. And -- and what does "Partnership/Ops  
15 XFN" mean? 07:40:28

16 A. Partnerships would mean the --  
17 partnerships team ops means the ops team. And XFN,  
18 in Facebook parlance, stands for cross-functional,  
19 i.e., people from different teams working together.

20 Q. And -- and what is the ops team? 07:40:47

21 That's developer operations; is that what  
22 that means?

23 A. In this case, it would mean developers  
24 operations, yeah.

25 Q. And just looking at this document, 07:40:57

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1       what -- is this a -- a Quip or -- you know, what is                   07:40:59  
2       the -- what is the -- how is this document  
3       generated?

4                   Do you know?

5           A.    I think this is a -- this is contents in                   07:41:08  
6       a Workplace group, which is a kind of internal  
7       version of -- of Facebook. But I can't be  
8       100 percent certain of that. And the formatting  
9       makes it hard to -- to follow. But I -- I think  
10      it's a Facebook group or a Workplace group.                   07:41:26

11          Q.    And so Facebook used its platform  
12      internally for employees to communicate with each  
13      other?

14          A.    That's correct. Today that's a tool  
15      called Workplace. But in the past, it was groups               07:41:43  
16      on -- on Facebook that were only available to  
17      employees.

18          Q.    And is that a -- is that a product that  
19      you can search?

20                So for example, if you wanted to search               07:41:59  
21      on the word developer operations, could you -- is  
22      that a searchable -- the tool allow for searches  
23      like that?

24                MR. BLUME: Objection. Form. And scope.

25                THE DEPONENT: I can't -- I can't give a               07:42:16

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1 canonical Facebook answer. But as a -- but as a 07:42:19  
2 user of the tool, you -- you can search for things.  
3 But I'm unclear on the -- the -- how -- how far the  
4 index goes back or -- or how the -- the search  
5 function works. 07:42:33

6 Q. (By Mr. Loeser) Okay. And it's a little  
7 hard to read on this, but the last entry in this  
8 series of messages is by you and it's -- it looks  
9 like July 24th, 2014.

10 Do you see that at the very top of the 07:42:47  
11 document?

12 A. I do.

13 Q. Okay. And is what I stated accurate?

14 A. Yeah. This is a message from me and I --  
15 on July 24th, 2014. 07:43:01

16 Q. Okay. So it is a long string and the --  
17 and the -- the font is small. And I'm going to ask  
18 you to turn a few pages into this string to the  
19 Bates number FB-CA-MDL-02978566.

20 A. I have it. 07:43:33

21 Q. Okay. And so -- yeah, there's the Bates.  
22 And so if we go up and -- and -- to read,  
23 we'll try to make this bigger if necessary.

24 But in the middle of that page there is a  
25 post -- is that the right way to describe it, a 07:43:41

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1 post? 07:43:44

2 A. I -- I think -- I think this is a post  
3 if -- if I'm right in identifying where this is  
4 from. We -- we can call it a post for the purposes  
5 of this conversation. 07:43:54

6 Q. Okay. And there's a post from  
7 Monica Mosseri, and it's dated February 10th, 2014;  
8 is that right?

9 A. That's right.

10 Q. And I'll just, for the record, read part 07:44:05  
11 of this post and -- and I have some questions for  
12 you.

13 Monica Mosseri writes "I just wanted to  
14 follow up on Jackie's post regarding the asks of  
15 the partnership team. The POC's for each group" -- 07:44:23  
16 what are POCs?

17 A. That would refer to points of contact.

18 Q. The points of contact "for each group  
19 (listed below) are responsible for completing these  
20 three buckets for" the "entire team. Please 07:44:37  
21 complete this by end of day Wed Feb 12th. If you  
22 have any questions please reach out to me and cc  
23 Simon Cross."

24 Do you see that?

25 A. I do. 07:44:47

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1 Q. And so Monica is informing the 07:44:51  
2 partnership teams that they have to fill out a  
3 spreadsheet that has three buckets; is that right?

4 MR. BLUME: Objection. Form.

5 Derek, does he have the -- does he have 07:45:02  
6 scrolling ability to see the context?

7 THE DEPONENT: I -- I do.

8 So sorry, Derek. Could you ask your  
9 question again.

10 Q. (By Mr. Loeser) Sure. 07:45:30

11 I just read a -- the beginning of the  
12 post and -- and asked you that, based upon this,  
13 Monica Mosseri notes, "I just wanted to follow up  
14 on Jackie's post regarding the asks of the  
15 partnership team. The Points of Contact for each 07:45:42  
16 group are responsible for completing these three  
17 buckets for" the "entire team."

18 And if you -- if you read through this,  
19 she's asking the partnership teams to classify the  
20 partners into one of three buckets; is that right? 07:45:52

21 MR. BLUME: Objection to form. And  
22 scope.

23 THE DEPONENT: I think that's what she's  
24 asking on the post, yes.

25 Q. (By Mr. Loeser) And if you move down 07:46:04

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1 the -- the -- her post a little bit, there's a 07:46:05  
2 No. 2. It says "Extension/Exemption."  
3 Do you see that?  
4 A. I do see that.  
5 Q. And she states "Identify your Partners 07:46:16  
6 with Platform Agreements or non-standard Platform  
7 Agreements & identify 'Backward Compatibility.'"   
8 Do you see that?  
9 A. I do.  
10 I do -- 07:46:25  
11 Q. And I'm going to read another part of  
12 this post.  
13 She writes "The capabilities that are in  
14 this spreadsheet columns U-B0 are capabilities that  
15 are now public but soon won't be as they are tied 07:46:52  
16 to a perm/API that we are deprecating in PS12n."  
17 Do you see that?  
18 A. I see that.  
19 Q. So she's asking the partner points of  
20 contact for each of these groups to put the 07:47:07  
21 partners into three buckets, and this is in the  
22 context of the permissions and the APIs that are  
23 being deprecated in connection with PS12n, right?  
24 MR. BLUME: Objection. Form. And scope.  
25 THE DEPONENT: That's what's on the page. 07:47:25

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1 Q. (By Mr. Loeser) So there's another line 07:47:35  
2 in this post in which she says "The existing  
3 Private API" -- or I'll start that again.

4 "The existing Private API's partners have  
5 access to are not listed in this doc and will go 07:47:52  
6 through a different review process."

7 Do you see that?

8 A. Yeah, I see that.

9 Q. And so she's identified, in addition to  
10 partners that will have private APIs going forward 07:48:07  
11 that didn't have them before, existing private API  
12 partners, and she's indicating that that will go  
13 through a different review process.

14 Do you recall that -- that different  
15 review process for partners that already had access 07:48:22  
16 to private APIs before the transition to the new  
17 platform?

18 A. I do not recall a different -- that  
19 different review process.

20 Q. And so did Facebook have a different 07:48:34  
21 review process for partners that already had access  
22 to private APIs before the transition to the new  
23 platform, when deciding whether they would continue  
24 to have access to information that partners would  
25 no longer have access to after the transition to 07:48:52

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1 the new platform? 07:48:55

2 MR. BLUME: Objection. Form. And scope.

3 THE DEPONENT: I -- I -- I can't -- I

4 can't say for certain if there was another process

5 or, if so, what that process was. 07:49:08

6 I don't -- I don't recall and it -- and

7 it hasn't come up in my conversations with people

8 or the documents I've reviewed.

9 Q. (By Mr. Loeser) So has Facebook

10 identified a group of partners that already had 07:49:21

11 private APIs at the time of the transition to the

12 new platform through which those partners were able

13 to obtain access to friend data?

14 MR. BLUME: Objection. Form. And scope.

15 THE DEPONENT: Sorry. Can you ask the 07:49:38

16 question again, please.

17 MR. LOESER: Sure. We can just read it

18 back.

19 THE DEPONENT: Sure.

20 MR. BLUME: I'll read it back. It's 07:49:43

21 fine.

22 Q. (By Mr. Loeser) So has Facebook

23 identified a group of partners that already had

24 private APIs at the time of the transition to the

25 new platform through which those partners were able 07:49:51

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1 to obtain access to friend data? 07:49:53

2 A. Has -- has Facebook? I mean, sorry.

3 At what time period are you asking had  
4 Facebook done that?

5 Q. At any point to the present. 07:50:05

6 MR. BLUME: Object to form.

7 THE DEPONENT: The -- the capabilities  
8 tool and the other tools would have identified  
9 which apps had access to -- to private APIs both  
10 before and after the advent of API v2. 07:50:29

11 Q. (By Mr. Loeser) Thank you.

12 All right. If we can turn to -- and I'll  
13 tell you the last four digits of the Bates -- Bates  
14 number. But it's -8568, which is two pages where  
15 we were before. 07:50:49

16 A. Yup. I see it.

17 Q. And there's a post by you in the middle  
18 of the page dated -- it looks like January 20 --  
19 I'm looking at the January 20 -- I can't see it on  
20 my page, but right down -- January 22nd, 200- -- 07:51:12  
21 okay. January 23rd, 2014. So top of the page  
22 you're looking at now.

23 Do you see that?

24 A. "Game Face Time," is that the -- the one  
25 you're referring to -- 07:51:31

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1 Q. Yeah. 07:51:32

2 A. -- or the one below?

3 Q. No, that -- the -- the "Game Face Time."

4 A. Okay.

5 Q. And -- and you write at the beginning of 07:51:39

6 this, "Game Face Time. Notes from today's XFN:

7 1/ We have 6 weeks to go."

8 And what you're talking about here is

9 until the new platform becomes live, right?

10 A. At this time we were working to a launch 07:51:52

11 date that was -- ended up being significantly

12 sooner than -- than the launch date. This is just

13 another example of how much changed in -- in terms

14 of preparation versus what actual happened.

15 So this point, "6 weeks to go," that's 07:52:10

16 for a launch date that was being prepared for but

17 didn't happen.

18 Q. Okay. And then you have No. 2, and it

19 states "We will have a Partnerships/Ops all hands

20 on the Login v4/PS12n launch in early Feb." 07:52:25

21 Do you see that?

22 A. I see that.

23 Q. And then you have an item 3 -- and if we

24 could highlight it, we would.

25 In the middle of that page you state "The 07:52:37

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1 next main job is to audit the 26" thousand -- and 07:52:41  
2 it says k, but I'm reading thousand -- "The next  
3 main job is to audit the 26,000 affected apps and  
4 determine which apps must be whitelisted for which  
5 features." 07:52:54

6 Do you see that?

7 A. I see that.

8 Q. Can you read the next sentence of your  
9 post for the record.

10 A. What's on the page is "The bar is very 07:53:03  
11 high: Contract commitment, inability to move fast  
12 (physical devices etc) or super-strategic use  
13 cases."

14 Q. So you put, at this time, six weeks  
15 before the launch of the new platform, you 07:53:20  
16 identified three different categories of -- of  
17 apps; is that right?

18 A. Where am I identifying the three  
19 different categories of apps?

20 Q. Well, one is -- you say -- I'll read it 07:53:38  
21 again.

22 "The next main job is to audit the 26,000  
23 affected apps and determine which apps must be  
24 whitelisted for which features. The bar is very  
25 high," and then you -- you identify "contract 07:53:50

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1 commitment." 07:53:54

2 So that's one of the categories that  
3 you're indicating should be whitelisted, right?

4 A. That's not a category I'm indicating  
5 should be whitelisted. I'm indicating -- well, I 07:54:03  
6 don't recall exactly what I meant. This is a long  
7 time ago.

8 But on the page, it's indicating the  
9 kinds of considerations that -- that may be  
10 appropriate. But these are not -- 07:54:19

11 Q. Okay.

12 A. These are not a categorization or  
13 taxonomy.

14 Q. All right. Well, let's try and  
15 understand what it is. 07:54:29

16 There's 26,000 apps you're referring to;  
17 is that right?

18 A. It says 26,000 affected apps on the -- on  
19 this -- on the page, yes.

20 Q. And then you indicate that you're seeking 07:54:40  
21 to determine -- Facebook is seeking to determining  
22 which apps must be whitelisted for which features;  
23 is that right?

24 MR. BLUME: Objection. Form.

25 And scope -- and scope. 07:54:51

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1 THE DEPONENT: Again, what -- that's -- 07:54:56

2 that's what's on the page.

3 Q. (By Mr. Loeser) That's what you wrote on  
4 this post?

5 A. Those are the words on this post that it 07:55:03  
6 looks like I wrote.

7 Q. And then you say that "The bar is very  
8 high."

9 You mean the bar for whitelisting is very  
10 high? 07:55:11

11 A. I would assume that's what I meant.

12 Q. And then you said that -- the first thing  
13 you identify after saying the bar is very high is  
14 contract commitment.

15 And does that refer to apps for which 07:55:24  
16 there was a contract commitment to continue to  
17 allow access to something that's being taken away  
18 in the transition to the new partnership -- or the  
19 new platform?

20 MR. BLUME: Objection. Form. And scope. 07:55:38

21 THE DEPONENT: I can't be 100 percent  
22 certain what I mean in this. Again, this is in a  
23 personal capacity.

24 But my reading of that is that if we want  
25 to whitelist them, if -- if they -- if there's a 07:55:51

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1 whitelisting requirement, that we would need a 07:55:54  
2 contract commitment to cover that -- to cover that.

3 Q. (By Mr. Loeser) And then you have  
4 another description here of something different,  
5 which is "inability to move fast (physical devices 07:56:03  
6 etc)," and that's another group or type or  
7 category -- and use the term that you want -- of  
8 apps that -- that you thought -- or Facebook  
9 thought needed to be whitelisted, right?

10 MR. BLUME: Objection. Beyond the scope. 07:56:19  
11 And form.

12 (Brief interruption.)

13 (Discussion off the stenographic record.)

14 Q. (By Mr. Loeser) Okay. So we discussed  
15 contract commitment, and the next thing you note -- 07:56:39  
16 you note after noting "The bar is very high" is  
17 "inability to move fast (physical devices)."

18 And are you saying there that another  
19 group to be whitelisted are those that have an  
20 inability to move fast? 07:56:48

21 A. I'm indicating that that might be one of  
22 the criteria that maybe is for consideration.

23 Q. Okay. And what's the last criteria that  
24 may be for consideration that you identify in this  
25 post? 07:57:10

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1           A.     Again, I wouldn't frame it as -- as                                 07:57:11  
2     criteria. This is just a list of statements. But  
3     the last one says "super-strategic use cases."

4 Q. And what were the super-strategic use  
5 cases that you're referring to here in this post to 07:57:35  
6 the teams involved in bucketing apps for the  
7 purpose of determining which should have continued  
8 access to -- to deprecated permissions?

9 MR. BLUME: Objection. Form.

10 THE DEPONENT: I do not know what 07:57:56  
11 super-strategic use cases I'm -- I'm referring to  
12 here mean. I certainly can't remember what I'm  
13 referring to.

14 Q. (By Mr. Loeser) So we're six weeks away  
15 from launch and you used the phrase 07:58:11  
16 "super-strategic use cases."

17                   And can Facebook tell me now, through  
18           you, as its corporate designee, what was meant by  
19           "super-strategic use cases"?

20 MR. BLUME: Objection. Form. And scope. 07:58:27

21 THE DEPONENT: I can't confirm what  
22 super-strategic use cases mean, either as a  
23 corporate representative and even in my personal  
24 capacity, I don't recall what -- what that's  
25 referring to. 07:58:43

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1 I think what's also important to note is 07:58:44  
2 your mentioning six weeks to launch here. A, that  
3 wasn't the case in the end. And B, no deprecations  
4 were going to take a place for a year after launch.  
5 And so there was no impending impact to existing 07:59:01  
6 apps and integrations for a considerable time to  
7 come. Much changed between then and later.  
8 Q. (By Mr. Loeser) And this is a long  
9 string and -- and I don't want to ask you to go  
10 through all of it now. But perhaps on your next 07:59:20  
11 break, you can take a spin.  
12 I don't see any post from anyone saying  
13 to you, leading right up until the launch date --  
14 by July 24th, 2014, had the platform actually been  
15 launched? 07:59:35  
16 A. Sorry. Can you give that date again.  
17 Q. Yeah.  
18 When -- when did -- when did platform 3.0  
19 launch?  
20 A. The -- several changes were announced, 07:59:47  
21 including API version 2 were launched on  
22 April the 30th, 2014. But they only came into  
23 force for new apps that were created after that  
24 date. Any app that was created before that date  
25 had no impact for another 12 months after that 08:00:07

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1 date. 08:00:09

2 Q. Okay. And so -- and this -- this post,  
3 the messages go up through July 24th, 2014, right?

4 That's what we are saw at the beginning  
5 of the -- of the document? 08:00:22

6 A. It looks like that's the first post in  
7 the thread.

8 Q. And I -- I've gone through the thread and  
9 I don't see any question from any person of any one  
10 of these teams saying to you, "Mr. Cross, what do 08:00:33  
11 you mean by super-strategic?"

12 And I don't -- you don't need to take the  
13 time right now, but perhaps on a break or  
14 otherwise, you should review this document. And if  
15 you find a question back to you stating some 08:00:45  
16 confusion about what that means, if you'll please  
17 let me know. I'd appreciate it.

18 MR. BLUME: We'll note your question,  
19 but...

20 MR. LOESER: Okay. So we can move on to 08:01:01  
21 the next exhibit, which has previously been marked  
22 Exhibit 14.

23 THE DEPONENT: I have it.

24 Q. (By Mr. Loeser) So this is an email  
25 dated February 9th, 2014, from Ime Archibong to 08:01:52

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1 Eddie O'Neil and to you. "Importance," it states 08:01:56  
2 "High."  
3 "Subject: FW: Our teams next steps for  
4 PS12n"; is that right?  
5 A. I see that. 08:02:07  
6 Q. And if you look down to Jackie Chang's  
7 email to you and to Ime Archibong, she writes  
8 "Actually - here's an updated version."  
9 And that's a reference, I assume, to the  
10 attachment to this -- this document; is that your 08:02:26  
11 understanding?  
12 MR. BLUME: Objection. Form.  
13 THE DEPONENT: It's -- it's reasonable,  
14 but I couldn't confirm it.  
15 Q. (By Mr. Loeser) Okay. And she writes, 08:02:33  
16 "I'll explain on the call, but in essence we're not  
17 going to grant any exceptions, only extensions  
18 based on contract and partner sensitivity."  
19 Do you see that?  
20 A. I do see that. 08:02:43  
21 Q. And she writes, "Where I've  
22 labeled 'exemptions' are actually private apis  
23 today that allow for friend data to be read."  
24 Do you see that?  
25 A. I see that. 08:02:53

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1 Q. She writes "I believe we should keep 08:02:55  
2 maintaining these apis as private strategic ones -  
3 however, it's worthwhile acknowledging this as  
4 there's been some confusion by partnership teams on  
5 how we plan to maintain these moving forward." 08:03:03

6 Do you see that?

7 A. I do see that.

8 Q. So tell me, what did Facebook mean in  
9 this context by "private strategic ones"?

10 MR. BLUME: Objection. Form. And beyond 08:03:18  
11 the scope.

12 THE DEPONENT: I can't answer that on  
13 what does Facebook mean. Again, this is an email  
14 thread between three people. So I don't think  
15 Facebook has a view on what that means. 08:03:29

16 I can answer based on my understanding  
17 and participation in this thread. But I don't  
18 think it would be right to characterize that as --  
19 as Facebook's opinion.

20 So with that, what this means is -- my 08:03:41  
21 understanding is this means maintaining the  
22 existing integrations that existed and had been  
23 built to date -- we talked about these earlier --  
24 that rely on private APIs to function.

25 Q. (By Mr. Loeser) Okay. And those are 08:04:06

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1 referred to here as private strategic ones? 08:04:06

2 A. In the document, they're referred to as  
3 private strategic ones.

4 Q. And she also references in her email  
5 "partner sensitivity." 08:04:18

6 What -- what is partner sensitivity?

7 A. Again, I don't think there's a corporate  
8 Facebook answer to that. And I wouldn't want to  
9 take [sic] a speculation. I wouldn't want to  
10 speculate as to what Jackie meant -- meant by that. 08:04:36

11 Q. And what does it mean to grant an  
12 extension based on partner sensitivity?

13 A. Again, I don't know what -- there's no --  
14 there's no corporate position on that. What Jackie  
15 means by that, I think you would have to ask her. 08:05:06

16 MR. LOESER: So why don't we turn to the  
17 presentation, which I will note for you is attached  
18 to the email that we just went through from  
19 Ime Archibong to you and Eddie O'Neil.

20 And this has been previously marked as 08:05:29  
21 Exhibit 15.

22 And for the record, the email was sent on  
23 February 9th, 2014, with this attachment.

24 THE DEPONENT: I have it.

25 Q. (By Mr. Loeser) Do you see the title of 08:05:54

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1 this document -- or the first heading on -- on the 08:05:58  
2 document is "[PS12n] Product Update - What -- "What  
3 Are We Announcing"?

4 Do you see that?

5 A. I see that. 08:06:12

6 Q. And who -- who is the intended audience  
7 of this -- of this presentation?

8 MR. BLUME: Objection. Form. And scope.

9 THE DEPONENT: I do not know who the  
10 intended audience of this was. 08:06:27

11 Q. (By Mr. Loeser) So let's look at the --  
12 the first page of this.

13 On the third bullet it states "Removing  
14 access to non-app friends. friend\_\* permissions  
15 being deprecated - apps will only get data about 08:06:52  
16 people who've explicitly logged-in with Facebook,  
17 not that user's incognizant friends."

18 What does "incognizant friends" refer to?

19 MR. BLUME: Objection. Form. And scope.

20 THE DEPONENT: I don't want to make a 08:07:13  
21 determination of a -- of -- of -- there's no  
22 corporate answer to what -- what that means. It  
23 would be a -- a dictionary definition to look it  
24 up.

25 Q. (By Mr. Loeser) Okay. What -- and -- 08:07:25

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1 and what -- how would Facebook use the term 08:07:26  
2 "incognizant friends" in this context?  
3 MR. BLUME: Scope --  
4 THE COURT REPORTER: Wait. Mr. Blume,  
5 you were muffled. 08:07:32  
6 MR. BLUME: Asked and answered. And  
7 beyond the scope.  
8 THE DEPONENT: Yeah. I -- I don't think  
9 Facebook has a -- a definition of what that means.  
10 Again, the author of this deck chose to use that 08:07:47  
11 word. It's not used --  
12 (Simultaneously speaking.)  
13 Q. (By Mr. Loeser) And next --  
14 A. -- in any other context.  
15 Q. And then the next bullet states 08:07:59  
16 "read\_stream (timeline API, Newsfeed API) being  
17 publicly deprecated. Partner/contract only."  
18 Does that suggest to you that the  
19 decision at this point was to deprecate read stream  
20 and make it available to partners by contract only? 08:08:16  
21 MR. BLUME: Objection. Form. And scope.  
22 THE DEPONENT: I -- I think it's wrong to  
23 characterize anything as a -- as a decision. All  
24 we can say is that this deck had been produced by  
25 somebody and that was their belief or understanding 08:08:34

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1 at the time. I don't think this is representative 08:08:39  
2 of a -- of a decision.

3 Q. (By Mr. Loeser) Okay. And when you say  
4 "somebody," we know from the prior email that this  
5 deck was prepared by Jackie Chang, right? 08:08:48

6 MR. BLUME: Objection.

7 Is there a Bates-stamped version, Derek?  
8 Oh, forget it. That's a native. Got it.

9 Q. (By Mr. Loeser) Right.

10 Mr. Cross, if you go back to Exhibit 14, 08:09:08  
11 you'll see that this is a presentation that was  
12 sent by Jackie Chang to Ime Archibong and to you,  
13 right?

14 A. Yes.

15 Q. Can you put up the prior -- sorry. I 08:09:29  
16 talked at the same time as you, which I -- I  
17 apologize for.

18 A. Apologies.

19 Yes, it looks like this deck was authored  
20 by Jackie. 08:09:41

21 Q. Okay. So let's go back to the deck.  
22 And if we look at the last slide of the  
23 deck, it says "Partnerships Update."

24 And do you see "Partner Identification &  
25 Impact Assessment"? 08:10:05

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1 A. I do. 08:10:06

2 Q. And the first bullet says "Product  
3 identified the 26,000 App IDs & 45+ affected APIs."

4 Do you say that -- see that?

5 A. I see that. 08:10:18

6 Q. And you recall you were involved in  
7 that -- in that bit of work, right?

8 A. I certainly was involved in pulling some  
9 data at various time. It's not clear that I was  
10 the source of those numbers. 08:10:28

11 Q. And then the next bullet says "XFN  
12 coordination," and then it lists a series of  
13 different types of -- of apps that should look  
14 familiar at this point because we've seen the same  
15 categorization in some of the documents that we've 08:10:41  
16 gone through, right?

17 A. Some of these are the same as categories  
18 in other documents.

19 Q. Okay. And it notes that Facebook was  
20 "deploying a top down and bottoms up T0 partner 08:10:55  
21 identification," right?

22 A. That's what it says on the slide.

23 Q. Okay. And you still don't recall what T0  
24 refers to?

25 A. As per my previous testimony, it's a 08:11:08

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1 categorization that was in use at the 08:11:11  
2 partnerships -- in the partnerships team at this  
3 time. But I don't recall what was categorized  
4 within T0, nor the criteria for that.

5 Q. And the next bullet says "Extensions & 08:11:25  
6 Private API Identification."

7 Do you see that?

8 A. I see that.

9 Q. And then it says "Granting no exemptions,  
10 except in the cases where we have:" 08:11:35

11 Do you see that?

12 A. I see that.

13 Q. And the first one to where there would be  
14 an exemption granted is "Wind-down"; is that right?

15 A. I don't think it's right to characterize 08:11:52  
16 this as deterministic as to why an exemption or  
17 extension would be granted. It's just a slide deck  
18 written by a person at a time. So that's what's on  
19 the slide.

20 Q. Okay. And this slide identifies 08:12:07  
21 circumstances where an exemption would be granted  
22 that would allow an app to continue to have access  
23 to data that would no longer be available after  
24 the transition to the new platform, right?

25 A. No. 08:12:28

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1 MR. BLUME: Form. And scope. 08:12:29

2 THE DEPONENT: No.

3 Q. (By Mr. Loeser) You're saying "no"  
4 because my statement is untrue?

5 A. That's correct. I don't think it 08:12:40  
6 specifies -- sorry.

7 Read me your question again, and I'll be  
8 able to point out the bit I was not able to agree  
9 with.

10 Q. Sure. I'll just ask another question. 08:12:48

11 This says that Facebook's going to be  
12 granting no exemptions, but then it lists some  
13 situations where it would be granting exemptions,  
14 right?

15 MR. BLUME: Objection to form. Scope. 08:12:58

16 THE DEPONENT: This does not -- sorry,  
17 Rob. Say it again.

18 MR. BLUME: Objection. Form. And scope.

19 THE DEPONENT: This doesn't represent  
20 Facebook's position on -- on -- on anything in 08:13:09  
21 particular. This is the -- what this person who  
22 authored the deck understood at the time.

23 Q. (By Mr. Loeser) Okay. So this person,  
24 Jackie Chang, who authored this deck at the time,  
25 February 14th, 2014 -- I'm sorry -- 08:13:24

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1 February 9th, 2014, believed that Facebook would be 08:13:30  
2 granting no exemptions except in the cases where we  
3 have "1. Wind-down" and "2. Private APIs"; is that  
4 right?

5 MR. BLUME: Objection. Form. And scope. 08:13:44

6 THE DEPONENT: That's what's on the  
7 slide.

8 Q. (By Mr. Loeser) And let's look at  
9 wind-down.

10 Do you know what wind-down means? 08:13:52

11 MR. BLUME: Objection. Scope.

12 THE DEPONENT: I wouldn't want to give  
13 like a Facebook answer to that. I think there's no  
14 standard definition for that.

15 In my personal capacity and having been 08:14:03  
16 involved in this, to me, that means that there  
17 would be a period by which those integrations would  
18 be deprecated or turned off over time.

19 Q. (By Mr. Loeser) And with regard to  
20 "Non-standard Platform Agreements specifying unique 08:14:22  
21 Backwards Compatibility"; is that what happened?

22 MR. BLUME: Objection. Form.

23 THE DEPONENT: I can't give answers in  
24 specific cases because I haven't investigated  
25 everything and memorized everything. 08:14:41

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1 But what I can say is that one thing 08:14:43  
2 you'll notice from this slide deck further up is  
3 that the plan of record in how to launch this  
4 differed relatively -- relatively drastically from  
5 what actually happened. 08:15:08

6 One of the big changes was the length of  
7 the deprecation window, a year. And one of the  
8 considerations would have been if there was a  
9 partner with a contract, we specified a notice  
10 period. And that notice period was less than the 08:15:28  
11 notice given than there would be a contractual need  
12 to comply. That's what it means by backwards  
13 compatibility.

14 Q. (By Mr. Loeser) Okay. So that was one  
15 of the situations where an exception would be 08:15:48  
16 provided to the deprecations from occurring on the  
17 time frame indicated in -- by Facebook, when it  
18 implemented the platform, right?

19 A. Not necessarily. The -- my -- my  
20 previous testimony is that if there was a 08:16:08  
21 relationship with a partner that had a notice  
22 period in the contract, then that might need to be  
23 considered in the -- the migration, although most  
24 of the entities that had private APIs had -- had  
25 contracts with us, had some form of private API. 08:16:35

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1 Q. Okay. And private API is another 08:16:38  
2 category.

3 But you describe a circumstance in which  
4 an exemption, as the -- as the format is presented  
5 here would -- would be granted. And that would be 08:16:45  
6 the backward compatibility-type contracts.

7 Facebook recognized there would need to  
8 be an exemption for that -- for that group?

9 A. It's -- it's -- it's possible -- the --  
10 the author of this deck suggests that that might be 08:16:59  
11 a possible reason to grant an extension or an  
12 exemption.

13 Q. Okay. So the author of this deck,  
14 Jackie Chang, thought that another possible reason  
15 was "Sensitive/strategic partner integrations 08:17:13  
16 requiring extension"; is that right?

17 MR. BLUME: Objection. Form. And scope.

18 THE DEPONENT: I can read what's on here,  
19 but this doesn't represent Facebook's position.  
20 This is what Jackie wrote in the slide. 08:17:26

21 Q. (By Mr. Loeser) Okay. And I -- I didn't  
22 see in the cover email -- it is -- does Jackie  
23 report to Ime Archibong, or did she at this time?

24 A. I don't know for -- for certain. But my  
25 understanding is that Jackie reported to Ime at 08:17:45

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1 this time. 08:17:49

2 Q. Okay. And did you see in that cover  
3 email any indication by Ime that he thought Jackie  
4 got it wrong when she described the circumstances  
5 for exemptions? 08:17:58

6 MR. BLUME: Objection. Form.

7 THE DEPONENT: I didn't see anything in  
8 the email thread, but that doesn't mean it -- there  
9 was -- there was disagreement or uncertainty at  
10 all. 08:18:13

11 I think -- remember, you're reading  
12 documents here about -- that -- that -- that are a  
13 team making progress as things shift around them.  
14 Nothing in here necessarily is -- is what happened  
15 or should have happened. 08:18:28

16 Q. (By Mr. Loeser) Okay. And then if we  
17 look at the next bullet in this presentation  
18 providing an update on -- what Facebook was going  
19 to be announcing about its platform change.

20 No. 2 is "Private APIs." 08:18:42

21 Do you see that?

22 A. I see it on the slide.

23 Q. And the bullet says --

24 MR. BLUME: Objection. Hold --

25 objection. Sorry. 08:18:47

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1                   Objection to the initial                   08:18:50

2           characterization.   And form to the question.

3           Q.    (By Mr. Loeser)   And you'll see the

4           bullet then says "Private use-cases for exemption

5           (i.e. Mobile RCP)."                   08:18:58

6                   What does that refer to?   What is --

7           what -- what are private use cases for exemption?

8           A.    My understanding is that this refers to

9           the existing integrations that had access to

10          private APIs, both before the change in the public           08:19:21

11          API service area and would be considered unaffected

12          by the changes to the public service area.

13          Q.    And are you aware of -- of any other

14          update or communication within the teams involved

15          in -- in the creation of this update of a different           08:19:57

16          format for determining when exemptions would be

17          granted?

18                   MR. BLUME:   Objection.   Scope.   Form.

19                   THE DEPONENT:   We've seen several

20          documents in this testimony that have very           08:20:11

21          different framings of what was launched, when --

22          what might be happening and why.   So we've already

23          looked at some alternatives I would suggest.

24          Q.    (By Mr. Loeser)   Okay.   And -- and we

25          went through a number of descriptions that referred           08:20:32

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1 to strategic partners; is that right? 08:20:34

2 MR. BLUME: Objection. Form.

3 THE DEPONENT: We went through a number

4 of documents which associated some entities with

5 the word "strategic." 08:20:44

6 Q. (By Mr. Loeser) When discussing whether

7 those partners would continue to have access to

8 publicly deprecated permissions, right?

9 MR. BLUME: Objection. Form.

10 THE DEPONENT: Generally, when we were 08:20:57

11 discussing the broad set of changes to the public

12 platform surface area.

13 Q. (By Mr. Loeser) So I want to make sure

14 we're clear so far on the record and the transition

15 to the new platform. 08:21:22

16 We've gone through a number of documents

17 in which the platform team and the developer

18 operations team discussed the changes that we

19 made -- that we made to the social Graph when Graph

20 API version 2 was implemented, right? 08:21:35

21 MR. BLUME: Objection. Form.

22 THE DEPONENT: Sorry. Yeah, I'm -- I'm

23 not -- I'm not what -- what specifically I'd be

24 agreeing to the affirmative there.

25 Q. (By Mr. Loeser) Well, I guess we can 08:21:50

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1 read the question back and see if there's anything 08:21:51

2 unclear about it.

3 So I want to make sure we are clear so

4 far on the record and the transition to the new

5 platform. We've gone through a number of documents 08:22:02

6 in which the platform team and the developer

7 operations team discussed the changes that would be

8 made to the social Graph when Graph API version 2

9 was implemented, right?

10 MR. BLUME: Objection. Form. 08:22:18

11 THE DEPONENT: So we've looked at a

12 number of documents that refer to the changes that

13 were ultimately launched on April the 30th, 2014.

14 Q. (By Mr. Loeser) And these changes

15 included publicly deprecating certain APIs that 08:22:31

16 were considered sensitive, including friend and

17 read stream permissions, right?

18 MR. BLUME: Objection. Form.

19 THE DEPONENT: API version 2 removed the

20 friend permissions. That was one of the changes 08:22:46

21 launched at the time.

22 Q. (By Mr. Loeser) And we've seen a variety

23 of discussions of the fact that certain apps and

24 partners would continue having access to certain of

25 the publicly deprecated APIs, right? 08:23:00

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A. There are a number of integrations that had access to private APIs before the change and would go on to have access to private APIs after the change.

08:23:06

5 Q. And in -- in addition to integrations, 08:23:21  
6 there were other apps that were considered for  
7 whitelist access to the publicly deprecated  
8 permissions, right?

9           A.     There was a number of discussions about  
10 whether or not apps should be granted additional                 08:23:35  
11 time to migrate or discussions about exemptions.  
12 We've seen those discussions.

13 Q. Okay. And Facebook management also  
14 discussed how to choose which apps and partners  
15 would continue having access to publicly deprecated 08:23:52  
16 APIs, right?

17 MR. BLUME: Objection. Form.

18 THE DEPONENT: Can you describe what you  
19 mean by "Facebook management"?

20	Q. (By Mr. Loeser) Sure.	08:24:04
----	--------------------------	----------

21                   The -- the Facebook managers whose email  
22       we reviewed over the course of the last several  
23       hours.

24	A. Can you be specific? "Facebook	
25	managers," I'm not -- not sure I understand that	08:24:15

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1 term. 08:24:16

2 Q. Sure.

3 Let's -- Ime Archibong, for example. KP.

4 Eddie O'Neil.

5 The people on these various emails we've 08:24:24

6 looked at are people who discussed and evaluated

7 how to choose which apps and partners would

8 continue having access to publicly -- publicly

9 deprecated APIs, right?

10 MR. BLUME: Objection. Form. 08:24:39

11 THE DEPONENT: We've seen a number of

12 email threads and documents where a number of

13 Facebook employees are discussing whether or not to

14 offer extensions or exemptions to the changes and

15 how that might be framed. 08:24:56

16 Q. (By Mr. Loeser) And sometimes how that  
17 might be framed was referred to by KP, for example,  
18 as a format, right?

19 MR. BLUME: Objection. Form.

20 THE DEPONENT: I -- KP may refer to that. 08:25:15

21 You can bring that up in a document again, if you

22 want me to agree to it. But what KP referred to it

23 is what KP referred to it.

24 Q. (By Mr. Loeser) Okay. And sometimes it

25 was referred to as a framework; is that right? 08:25:27

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1 MR. BLUME: Objection. Form. 08:25:30

2 THE DEPONENT: I don't know what you're  
3 referring to with the -- with the phrase "it."

4 Q. (By Mr. Loeser) Oh. The discussion as  
5 to which apps and partners would continue to have 08:25:38  
6 access to deprecated permissions.

7 MR. BLUME: Objection. Form.

8 THE DEPONENT: So again, I think you're  
9 mixing a few concepts up there. You're suggesting  
10 there's a specific framework and then you're 08:25:51  
11 talking about a number of -- there's a wide range  
12 of discussions that happened on this topic  
13 involving different people at different times.

14 Q. (By Mr. Loeser) Nonetheless, there was a  
15 discussion of -- of a framework that could be or 08:26:04  
16 would be developed to determine which apps and  
17 partners would continue to have access to  
18 deprecated permissions and which would not, right?

19 MR. BLUME: Objection. Form. And scope.

20 THE DEPONENT: What we've reviewed today 08:26:17  
21 is there's a number of people attempting to put  
22 together some suggestions or ways to think about  
23 whether or not certain entities should or should  
24 not be given additional access. But we have not  
25 reviewed anything that necessarily ever got 08:26:42

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1 implemented. 08:26:46

2 Q. (By Mr. Loeser) Okay. And it's fair to  
3 say that deciding what apps and partners would  
4 retain access to publicly deprecated permissions  
5 was an important decision for Facebook, right? 08:26:53

6 MR. BLUME: Objection. Form.

7 THE DEPONENT: I think when we're making  
8 changes to the platform, we wanted to be  
9 considerate about how those changes would be  
10 implemented and the impact they would have on users 08:27:12  
11 and developers.

12 Q. (By Mr. Loeser) Losing access to  
13 friend-sharing permissions, for example, could  
14 damage relationships that Facebook have with app  
15 develop- -- developers and strategic partners, 08:27:25  
16 right?

17 MR. BLUME: Objection. Form.

18 THE DEPONENT: Any change to the Facebook  
19 development --

20 MR. BLUME: Form and scope. 08:27:33

21 THE DEPONENT: Sorry. Can you repeat the  
22 question again.

23 Q. (By Mr. Loeser) Losing access to  
24 friend-sharing permissions, for example, could  
25 damage relationships that Facebook had with app 08:27:50

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1 developers and strategic partners, right? 08:27:53

2 MR. BLUME: Same objection.

3 THE DEPONENT: As a platform, when you

4 make changes of -- of any type, they can have

5 impact on the developers and users of your 08:28:06

6 platform, and this set of changes was -- was no

7 exception.

8 Q. (By Mr. Loeser) And granting exemptions

9 was also a big deal for Facebook because it

10 protected important relationships it had with 08:28:19

11 developers and partners, right?

12 MR. BLUME: Objection. Form.

13 THE DEPONENT: There were integrations

14 that were valuable to users and to developers and

15 to Facebook. And it was -- it was valuing 08:28:34

16 continuing those -- sorry.

17 Can you repeat the question again? I

18 want to make sure I'm answering.

19 Q. (By Mr. Loeser) And granting exemptions

20 was also a big deal for Facebook because it 08:28:57

21 protected important relationships it had with

22 developers and partners, right?

23 A. I don't feel I can represent like whether

24 or not this was important to Facebook.

25 I can -- I can say that when you're 08:29:13

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1 making changes to your developer platform and 08:29:15  
2 there's integrations which are existing and  
3 valuable to people and developers and Facebook,  
4 that some of those might -- you may want to  
5 continue and changing -- but because of their value 08:29:36  
6 to people, developers and Facebook.

7 Q. The Facebook management team was aware  
8 that some developers and partners would retain  
9 access to deprecated permissions, like friend  
10 sharing, after the implementation of Graph API 08:29:51  
11 version 2, right?

12 A. Can you repeat the question, please.

13 MR. LOESER: Rebecca, do you mind reading  
14 the question back.

15 (Record read as follows: 08:30:00

16 "QUESTION: The Facebook management  
17 team was aware that some developers  
18 and partners would retain access to  
19 deprecated permissions, like friend  
20 sharing, after the implementation of 08:30:00  
21 Graph API version 2, right?")

22 MR. BLUME: Objection. Form.

23 THE DEPONENT: The changes to the public  
24 API surface area, there were -- there were -- there  
25 were no plans, I'm aware of, to, at the time, 08:30:27

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1 deprecate the device integrations or other 08:30:30

2 integration partners.

3 Q. (By Mr. Loeser) And Mr. Cross, Facebook

4 management was aware of that, right?

5 MR. BLUME: Objection. Form. 08:30:41

6 THE DEPONENT: I can't say if Facebook

7 management was aware. There's a number of threads

8 on this topic.

9 Q. (By Mr. Loeser) Was Mark Zuckerberg

10 aware of that? 08:30:54

11 MR. BLUME: Objection. Form.

12 THE DEPONENT: I don't know if

13 Mark Zuckerberg was aware of that.

14 MR. LOESER: Let's look at -- introduce a

15 new exhibit. 08:31:06

16 (Exhibit 342 was marked for

17 identification by the court reporter and is

18 attached hereto.)

19 MR. LOESER: We'll mark Exhibit 342.

20 Q. (By Mr. Loeser) This is an email from 08:31:30

21 Eddie O'Neil to Mark Zuckerberg with a cc to Mike

22 Vernal, Douglas Purdy and Ilya Sukhar, dated

23 January 27th, 2014, "Subject: platform model

24 changes."

25 Do you see that? 08:31:44

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1 A. I see that. 08:31:45

2 Q. And who, of the recipients of this email,  
3 was on the Facebook management team at this time?

4 A. Can you help me understand what you mean  
5 by the "Facebook management team"? 08:31:58

6 Q. Sure.

7 There was the document earlier that was  
8 the M Team, and I'm referring to the M Team.

9 Is that the management team?

10 A. Well, there's -- there's a thing called 08:32:09  
11 the M Team, which is Mark's -- Mark's leadership  
12 group.

13 Q. So -- so who -- who, on this list, would  
14 be considered Facebook leadership?

15 MR. BLUME: Objection. Form. And scope. 08:32:23

16 THE DEPONENT: I mean, I think it's  
17 reasonable to assume Mark would be considered  
18 Facebook leadership. But I couldn't answer the  
19 question as to which other people on the thread  
20 were on the M Team at the time. 08:32:37

21 Q. (By Mr. Loeser) What was Eddie O'Neil's  
22 position at the time?

23 A. Again, I don't want to give a canonical  
24 answer, but my understanding is he was a product  
25 manager on the Facebook platform team. 08:32:54

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1 Q. And if you look at the first line of 08:32:58  
2 Mr. O'Neil's email to Mark Zuckerberg, he states  
3 "Hi Mark - attached are the slides we reviewed and  
4 a list of key apps affected by the API  
5 deprecations/privatizations." 08:33:10  
6 Do you see that?  
7 A. I see that.  
8 Q. And do you see that he writes "To clarify  
9 my perspective: I feel strongly that we should make  
10 these changes - want to be sure we've considered 08:33:23  
11 alternative viewpoints, but my opinion is solid.  
12 We need to realign our relationship with developer  
13 in order to put the ecosystem in a sustainable  
14 place and to improve user trust."  
15 Do you see that? 08:33:34  
16 A. I do see that.  
17 Q. So does this indicate to you, as  
18 Facebook's corporate designee, that Mr. Zuckerberg  
19 was made aware of the platform model changes that  
20 would occur when the platform 3.0 was implemented? 08:33:46  
21 MR. BLUME: Objection. Form. Scope.  
22 THE DEPONENT: I -- it -- it would  
23 indicate to me that Mark had received this email.  
24 I don't know whether or not he was aware of it. It  
25 doesn't mean he necessarily read the email. So I 08:34:07

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1 it as a significant event for Facebook? 08:35:54

2 MR. BLUME: Objection. Scope.

3 THE DEPONENT: I -- I wouldn't want to --

4 it's -- it's an event. There are many events. I

5 don't think it necessarily needs to be pegged as 08:36:06

6 significant.

7 Q. (By Mr. Loeser) Is it something that

8 people who present at the event do some preparation

9 in advance or do they just wing it?

10 MR. BLUME: Objection. Form. Scope. 08:36:20

11 THE DEPONENT: Typically, when you speak

12 at F8, you've done a little prep.

13 Q. (By Mr. Loeser) And the reason for the

14 prep is so that you can speak accurately?

15 MR. BLUME: Objection. Form. 08:36:37

16 THE DEPONENT: So you can deliver -- in

17 general, preparation helps you deliver a good

18 presentation.

19 Q. (By Mr. Loeser) And is a good

20 presentation also a presentation that is accurate? 08:36:49

21 A. Again, I'm not going to offer a Facebook

22 answer to that.

23 In my personal capacity, when presenting,

24 I would generally like to be accurate.

25 MR. BLUME: Is this a good time for a 08:37:16

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1 break, Derek? We've been going about an hour. 08:37:17

2 MR. LOESER: Sure. Sure. Let's try and

3 keep it a little shorter than some of the other

4 ones. But if we actually can get back on in ten

5 minutes, that would be great. 08:37:28

6 We can go off the record.

7 THE VIDEOGRAPHER: Okay. We're off the

8 record. It's 8:37 p.m.

9 (Recess taken.)

10 THE VIDEOGRAPHER: We're back on the 08:37:34

11 record. It's 8:50 p.m.

12 Q. (By Mr. Loeser) Mr. Cross, you mentioned

13 the April 30th, 2018, F8 conference; is that right?

14 A. April the 30th, 2014.

15 Q. 2014. I'm sorry. 08:50:31

16 And -- and that is the F8 where Facebook

17 announced the changes that were being made to the

18 platform with the introduction of Graph API

19 version 2, right?

20 A. That's the event where Graph API 08:50:44

21 version 2 and the new login were -- were announced

22 publicly.

23 Q. And were you at the April 30th, 2014, F8?

24 A. I was at the event.

25 Q. And was -- was Ime Archibong at that 08:51:04

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1 event? 08:51:06

2 A. I couldn't say for certain. I -- I  
3 would -- he may -- he may well have been, but I  
4 couldn't say for certain.

5 Q. And do you know -- and I'll just list the 08:51:17  
6 names and you tell me if you know if they were  
7 there.

8 Was Eddie O'Neil at that event?

9 A. Eddie O'Neil was there.

10 Q. And was Jackie Chang at that event? 08:51:25

11 A. I don't know if Jackie Chang was there.

12 Q. Was KP at that event?

13 A. I don't know for certain if KP was there.

14 Q. Now, the keynote at the F8 was -- was  
15 delivered by Mark Zuckerberg; is that right? 08:51:41

16 A. That's correct.

17 Q. And was that normally what happened at  
18 the F8?

19 A. Mark has historically given the keynote  
20 at F8s. 08:51:59

21 Q. And -- and that's so he can deliver  
22 important news or information about Facebook for  
23 that year?

24 MR. BLUME: Objection. Form.

25 THE DEPONENT: Yes. So that Mark can 08:52:09

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1 update our developer community on what he -- what 08:52:12  
2 we're going to launch and what he thinks is coming  
3 next.

4 Q. (By Mr. Loeser) We have a video clip of  
5 that portion of Mr. Zuckerberg's keynote address 08:52:24  
6 and we're going to play it. And then I'll have a  
7 few follow-up questions for you about what he said.

8 Okay?

9 A. Okay.

10 (Video playing.) 08:52:34

11 Q. (By Mr. Loeser) Were you able to hear  
12 that, Mr. Cross?

13 A. I could hear that, yeah.

14 Q. Okay. So during that keynote  
15 presentation, Mr. Zuckerberg described the changes 08:53:50  
16 that were going to be made with regard to the  
17 sharing of friend information, in particular; is  
18 that right?

19 A. He talked about how the -- the API for  
20 most developers was going to change. 08:54:07

21 Q. And he -- he didn't actually use the  
22 phrase "most developers," did he?

23 A. I don't recall exactly.

24 MR. LOESER: Well, we have a copy of the  
25 transcript and we can mark this as the next 08:54:24

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1 exhibit, which has previously been marked as 08:54:26

2 Exhibit 17.

3 Q. (By Mr. Loeser) And I'll represent to

4 you that this is a transcript of Mr. Zuckerberg's

5 April 30th, 2014, keynote address at the F8. 08:54:40

6 And if we go to the fifth page -- do you

7 see the paragraph in the middle, "And in the past,

8 when one of your friends logged into an app, in

9 this case Ilya, the app could ask him not only to

10 share his data but also data that his friends had 08:55:07

11 shared with him."

12 Do you see that?

13 A. I see that.

14 Q. And having just listened to the -- the

15 recording of the presentation, do those words look 08:55:14

16 familiar to you?

17 A. They do.

18 Q. And so what Mr. Zuckerberg said is, "So

19 now we're going to change this and we're going to

20 make it so that now everyone has to choose to share 08:55:28

21 their own data with an app themselves"; is that

22 right?

23 A. That's what he said.

24 Q. So -- and for that to occur, that would

25 mean that -- that no app would get access to data 08:55:41

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1 about anyone other than the Facebook user using the 08:55:45  
2 app, correct?

3 A. I'm not sure that is -- has to be true  
4 for -- for this to make sense.

5 Q. Okay. So tell me what -- when -- when he 08:55:58  
6 says so -- "So now we're going to change this and  
7 we're going to make it so that now everyone has to  
8 choose to share their own data with an" apps  
9 themselves -- "with an app themselves," in that  
10 statement, is there some indication that -- that 08:56:11  
11 not everyone has to choose to share their own data  
12 with an app themselves?

13 MR. BLUME: Objection. Form. Scope.

14 THE DEPONENT: So -- sorry. Ask the  
15 question again, please. 08:56:29

16 Q. (By Mr. Loeser) Mr. Zuckerberg stated  
17 "So now we're going to change this and we're going  
18 to make it so that now everyone has to choose to  
19 share their own data with an app themselves,"  
20 right? 08:56:38

21 A. That's what he said.

22 Q. Okay. He didn't say "We're going to make  
23 it so that now some people have to choose to share  
24 their own data with an app themselves," did he?

25 A. He didn't say that. Assuming this is his 08:56:51

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1 transcript. 08:56:57

2 Q. Okay. And now, Mr. Cross, it's true, is  
3 it not, that after the transition to Graph API  
4 version 2 -- strike that.

5 It is not true that after the transition 08:57:17  
6 to Graph API version 2, "No app would get access to  
7 data about anyone other than the Facebook user  
8 using the app", correct?

9 A. Mark is speaking here to the broad  
10 develop community and referring to the generally 08:57:34  
11 publicly available Facebook developer platform.  
12 And over time, we transitioned all applications  
13 to -- we transitioned most applications to  
14 version 2 and ultimately deprecated the friend  
15 permissions for everyone. 08:58:00

16 Q. Okay. Mr. Cross, show me where in this  
17 statement that Mr. Zuckerberg made at the --  
18 April 30th, 2018, he suggests that -- that some  
19 people would have to choose to share their own data  
20 but others would not have that ability. 08:58:13

21 A. Well, so an application that had been  
22 upgraded or migrated to version 2, it was part of  
23 the public API surface area. The behavior is the  
24 same for all users.

25 Q. Yeah. Mr. Cross, let's go back to the 08:58:32

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1 transcript because I really -- I'm trying to 08:58:33  
2 understand what words were said and what were not.  
3 And when Mr. Zuckerberg said "So now  
4 we're going to change this and we're going to make  
5 it so that now everyone has to choose to share 08:58:44  
6 their own data with an app themselves," that was  
7 not a true statement, was it?  
8 MR. BLUME: Objection. Form. And scope.  
9 THE DEPONENT: So I -- I can't like give  
10 the, you know -- like I can't be sure exactly what 08:59:01  
11 Mark had in his head when he said this. Only he  
12 can -- this is his transcript.  
13 So what was the question again? Sorry.  
14 MR. LOESER: If we could read the  
15 question back, please, Rebecca. 08:59:28  
16 (Court Reporter initiates discussion off  
17 the record.)  
18 MR. LOESER: I can -- I can restate the  
19 question.  
20 Q. (By Mr. Loeser) When Mr. Zuckerberg 09:00:03  
21 stated at the F8, "So now we're going to change  
22 this and we're going to make it so that now  
23 everyone has to choose to share their own data with  
24 an app themselves," that was not a true statement  
25 at time, was it? 09:00:15

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1 MR. BLUME: Objection. Form. And scope. 09:00:17

2 THE DEPONENT: That is -- that is true

3 for the public API surface area, once all apps had

4 been transitioned to API version 2 and the friend

5 permissions have been deprecated for everyone. 09:00:37

6 Q. (By Mr. Loeser) It was never the case,

7 Mr. Cross, that everyone was given the opportunity

8 to choose to share their own data with an app

9 themselves because of the exemptions that were made

10 to the deprecations of friend-sharing APIs; isn't 09:00:53

11 that right?

12 A. The friend permissions were deprecated

13 and removed for everybody over time. The migration

14 here is a process, and it took time. But as of

15 now, there are no friend permissions and that is 09:01:14

16 the case for everyone.

17 Q. And you're talking about as of now, as of

18 2022?

19 A. I am talking about as of now, as of 2022.

20 Q. So this was announced in 2014; is that 09:01:33

21 right?

22 A. He's making this announcement in 2014.

23 Q. Okay. So in 2015, it was not true that

24 everyone has to choose to share their own data with

25 an app themselves, right? 09:01:47

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1 MR. BLUME: Objection. Form. And scope. 09:01:49

2 THE DEPONENT: The migration to -- from  
3 API v1 to v2 took a long period of time. And  
4 continued into 2016 -- into 2015, and continued on.

5 Q. (By Mr. Loeser) And so the answer to my 09:02:11  
6 question is correct?

7 MR. BLUME: Objection. Form.

8 THE DEPONENT: Sorry. I'm not sure what  
9 I'm agreeing to there.

10 Q. (By Mr. Loeser) My question is, in 2015, 09:02:25  
11 it was not true that everyone had to choose to  
12 share their own data with an app themselves, right?

13 MR. BLUME: Same objection.

14 THE DEPONENT: In 2015 -- in 2015, API  
15 version 1 was still available to any application 09:02:41  
16 that had been created before F8 2014.

17 Q. (By Mr. Loeser) Okay. And after the new  
18 platform became operative in 2015, it was still not  
19 true that everyone has to choose to share their own  
20 data with an app themselves, right? 09:02:57

21 MR. BLUME: Objection. Form.

22 THE DEPONENT: The deprecation of API v1  
23 and the friend permissions was a process that took  
24 some time.

25 Q. (By Mr. Loeser) Okay. So can you answer 09:03:08

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1 my question? 09:03:10

2 A. Sorry. In -- repeat the question,  
3 please.

4 Q. After the new platform became operative  
5 in 2015, it was still not true that everyone has to 09:03:23  
6 choose to share their own data with an app  
7 themselves, right?

8 A. Well, the -- the -- after the new  
9 platform version became operative, there was still  
10 a migration process underway that took some more 09:03:42  
11 time and that continued into -- into 2015.

12 Q. Okay. So can you answer my question,  
13 please.

14 MR. BLUME: Objection. Form.

15 THE DEPONENT: So in API version 2, there 09:03:58  
16 were -- in 2015, there were still apps in the  
17 process of migrating from one to the other and that  
18 process continued. And while that process  
19 continued, then some applications had access to  
20 friends information. 09:04:24

21 Q. (By Mr. Loeser) So the answer to my  
22 question is correct?

23 MR. BLUME: Objection. Form.

24 THE DEPONENT: I feel like I've answered  
25 the question. I'll restate my testimony again. 09:04:36

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1           The migration from version 1 to version 2           09:04:38  
2       took a period of time. And while that took place  
3       there were some applications that retained the  
4       ability to access friends information.

5           Q.     (By Mr. Loeser) And because the           09:04:57  
6       migration took, as you say, a long period of time,  
7       it was not true that everyone could choose to share  
8       data with an app themselves in 2015, after the new  
9       platform was introduced, correct?

10          MR. BLUME: Objection. Form. Scope.           09:05:07

11          THE DEPONENT: As I've explained, the way  
12       the platform migration worked is it took a period  
13       of time and during that migration period some apps  
14       had the ability to access friends information until  
15       the friend permissions were finally removed for       09:05:24  
16       everyone.

17          Q.     (By Mr. Loeser) And, sir, I'm going to  
18       ask you to answer my question again. And we can  
19       read the question back. And I understand your  
20       reference to the migration taking a long period of       09:05:35  
21       time, but my question is very specific.

22          Because the migration took a long period  
23       of time, as you say, it was not true that everyone  
24       could choose to share data with an app themselves  
25       in 2015, after the platform became operative,       09:05:48

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1 correct? 09:05:52

2 MR. BLUME: Objection. Form.

3 THE DEPONENT: The platform -- the

4 platform became operative for -- for new

5 applications in 2014, so -- I mean, again, in 2015, 09:05:57

6 while the process of migration was still underway,

7 apps -- some apps retained the ability to access

8 friends information until the friend permissions

9 were ultimately deprecated.

10 Q. (By Mr. Loeser) And that was also true 09:06:23

11 in 2016, correct?

12 A. In 2016, there were still some

13 applications that had access to friends

14 information.

15 Q. And that was also true in 2017, correct? 09:06:33

16 A. In 2017, there were some integrations

17 that still retained access to friends information.

18 Q. And that is still true in 2017, correct?

19 A. In 2017, there were some applications

20 that had access to friends information due to being 09:06:55

21 integration partners.

22 Q. And that's -- that was true in 2018 also,

23 correct?

24 A. The friend permissions were ultimately

25 deprecated for all apps for all users in 2018. 09:07:08

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1 Q. And in 2019, there were still some apps 09:07:14  
2 that emitted friend data; isn't that right?

3 A. The friend permissions were deprecated  
4 for -- removed for everybody, for all apps, in  
5 March 2018. 09:07:25

6 Q. Right. But as we talked about on Monday,  
7 there are other APIs that emit friend data even  
8 though they're not friend permissions; isn't that  
9 right?

10 MR. BLUME: Objection. Form. 09:07:36

11 THE DEPONENT: Can you remind me what you  
12 define as friends data?

13 Q. (By Mr. Loeser) Well, we went through  
14 this in some detail on Monday. But the post APIs  
15 and the groups APIs and the events APIs and the 09:07:51  
16 tagable friends APIs, the inviteable friends API,  
17 those were all APIs that you testified did emit  
18 friend data, right?

19 A. Those APIs -- some of them emitted very  
20 limited amounts of information. But those APIs, as 09:08:08  
21 I understand it, were still operational in 2018.

22 Q. And those were still operational in 2019,  
23 too, right?

24 A. I -- many updates to the platform  
25 happened in 2018, including a new API version which 09:08:27

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1 dramatically limited the amount of information 09:08:31

2 available to applications even further.

3 Q. Nonetheless, there were still apps

4 emitting friend data in 2019, right?

5 A. In 20-- in 2019, there were some apps 09:08:44

6 discovered that still had access to friends

7 information.

8 Q. And that's true in 2020, as well, right?

9 A. My understanding is that all of the apps

10 that were discovered that had access to friends 09:09:03

11 information were removed in 2018.

12 Q. Except for the apps that you talked about

13 on Monday that weren't friends permissions but

14 emitted friend data, right?

15 A. I'm not sure exactly the state of the 09:09:27

16 APIs in 2019.

17 Q. And what about in 2020?

18 MR. BLUME: Objection. Form.

19 THE DEPONENT: Again, the APIs, as they

20 exist in 2019 and -- and 2020, I count -- I do not 09:09:41

21 know exactly the details of how those APIs

22 function.

23 Q. (By Mr. Loeser) So you can't testify

24 today as to whether Facebook continues to allow

25 apps to emit friend data in 2020? 09:09:58

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1 MR. BLUME: Objection. Form. 09:10:03

2 THE DEPONENT: The friend permissions  
3 were deprecated in 2018. And the API was updated  
4 also in 2018 to significantly reduce the amount of  
5 information that was available to applications. 09:10:16

6 And there was -- those were major steps forwards  
7 [sic] in reducing the amount of data available to  
8 apps.

9 Q. (By Mr. Loeser) Understood.

10 But as you said, in 2019, there were 09:10:31  
11 still APIs that emitted some friend data, right?

12 A. I'm not confident in understanding how  
13 the API worked in 2019.

14 Q. So can you, as Facebook's corporate  
15 designee today, testify as to whether there are 09:10:51  
16 APIs in use in 2019, 2020, 2021 and 2022 that still  
17 emit some friend data?

18 MR. BLUME: Objection. Form.

19 THE DEPONENT: I do not know how -- in  
20 detail how the APIs work today or worked in 2018, 09:11:09  
21 '19 and '20.

22 Q. (By Mr. Loeser) So the answer to my  
23 question is no, as the corporate designee, you  
24 cannot testify and provide an answer to that  
25 question? 09:11:24

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1 MR. BLUME: Objection. Form. 09:11:26

2 THE DEPONENT: I can't say for certain  
3 how the API functions today or in the last three  
4 years.

5 Q. (By Mr. Loeser) But on Monday you were 09:11:34  
6 able to testify about the friend data that these  
7 other APIs that we talked about did emit some  
8 friend information; is this right?

9 A. Which other APIs are you referring to?

10 I think that probably matters. 09:11:46

11 Q. The ones that we just went through; the  
12 groups, events, posts, tagable friends, inviteable  
13 friends, the whole list.

14 A. Those APIs were deprecated in the past.

15 I think most of those APIs were deprecated in 2018. 09:12:03

16 Q. You think. But who -- who knows for  
17 sure?

18 A. The tagable friends and the inviteable  
19 friends API were certainly deprecated in 2018, and  
20 these APIs -- the -- the change log of which APIs 09:12:17  
21 were deprecated and when is available on Facebook's  
22 developer website.

23 I just haven't memorized all of that  
24 information for you.

25 Q. So perhaps on Monday you could testify as 09:12:29

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1 to when those other APIs that emitted friend data 09:12:31  
2 were deprecated, if they were.

3 Is that something you can investigate?  
4 MR. BLUME: Objection. Form.

5 Noted. 09:12:48

6 Q. (By Mr. Loeser) Now, Mr. Cross, it is  
7 not true that after the transition to Graph API  
8 version 2 no app would get access to data about  
9 anyone other than the Facebook user using the app,  
10 right? 09:13:01

11 MR. BLUME: Objection. Form.

12 THE DEPONENT: Sorry. Can you repeat --  
13 can you repeat the question.

14 MR. LOESER: Sure. If we could read it  
15 back, please. 09:13:06

16 THE COURT REPORTER: Wait. Could you  
17 slow down a little bit, Mr. Loeser.

18 MR. LOESER: Sure. I'm sorry. And I can  
19 just read the question again.

20 THE COURT REPORTER: Thank you. 09:13:06

21 Q. (By Mr. Loeser) Mr. Cross, it is not  
22 true that after the transition to Graph API  
23 version 2, no app would get access to data about  
24 anyone other than the Facebook user using the app,  
25 correct? 09:13:28

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1 MR. BLUME: Objection. Form. 09:13:31

2 THE DEPONENT: The way the APIs  
3 functioned was that the -- even after the  
4 deprecation of the -- the friend permissions, there  
5 were still cases where an app would emit some 09:13:41  
6 information about people who had interacted with  
7 the content that the app user had posted.

8 Q. (By Mr. Loeser) So the answer to my  
9 question is, correct, it is not true that no app  
10 would get access to data about anyone other than 09:14:01  
11 the Facebook user using the app after Graph AP one  
12 [sic] version 2 was implemented?

13 A. Graph API version 2 removed the friend  
14 permissions from the public surface area of the  
15 API. But there were no guarantees made about other 09:14:16  
16 information that the API would emit.

17 Q. And Mr. Zuckerberg didn't say in his  
18 keynote address that they were deprecating friend  
19 permissions for most apps, but they were going to  
20 continue to allow access to those apps after 09:14:34  
21 Graph -- Graph API version 2 was implemented for  
22 certain partners chosen by Facebook, right?

23 That's not in his keynote address, is it?

24 MR. BLUME: Objection. Form. Scope.

25 THE DEPONENT: You have the transcript of 09:14:51

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1 what he said in the keynote. 09:14:52

2 Q. (By Mr. Loeser) And -- and when I played  
3 the portion of the transcript, you didn't hear him  
4 say those words; is that right?

5 MR. BLUME: Objection. Form. Scope. 09:15:01

6 THE DEPONENT: I didn't hear Mark say the  
7 words that you just said.

8 Q. (By Mr. Loeser) And at the time that  
9 Mr. Zuckerberg made these statements, Facebook knew  
10 that certain app developers and partners with, 09:15:10  
11 quote, nonstandard platform agreements, unquote,  
12 would be given continued access to friend data  
13 after Graph AP one -- API version 2 was  
14 implemented, right?

15 MR. BLUME: Objection. Asked and 09:15:23  
16 answered.

17 THE DEPONENT: The -- at the time there  
18 were -- the -- there were a number of integrations  
19 that existed through -- device integrations and  
20 integration partners. And there was, as I 09:15:38  
21 understand it, no plans to deprecate those.

22 Mark is speaking to a public developer  
23 audience and referring to the public developer  
24 platform.

25 Q. (By Mr. Loeser) And just to be clear, 09:15:55

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1 Mr. Zuckerberg knew that certain app developers and 09:15:55  
2 partners with nonstandard platform agreements would  
3 be given continued -- continued access to friend  
4 data after Graph API version 2 was implemented,  
5 right? 09:16:09

6 MR. BLUME: Objection. Asked and  
7 answered. Form and scope.

8 THE DEPONENT: Sorry, Rob. Can you  
9 say --

10 Q. (By Mr. Loeser) Sure. 09:16:18

11 MR. BLUME: Sure. I objected that --  
12 that it was asked and answered. And I objected to  
13 form and scope.

14 Q. (By Mr. Loeser) At the time  
15 Mr. Zuckerberg gave his keynote address on 09:16:25  
16 April 30th, 2014, at the F8, Facebook knew that  
17 certain app developers and partners with  
18 nonstandard platform agreements would be given  
19 continued access to friend data after Graph AP one  
20 version 2 was implemented, right? 09:16:42

21 MR. BLUME: Objection. Scope. Form.

22 THE DEPONENT: Sorry. Say that again,  
23 Rob.

24 MR. BLUME: Yeah. Objection to form.

25 THE DEPONENT: There were apps still on 09:17:00

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1 whitelists and there were no plans that I was aware 09:17:04  
2 of to -- to deprecate the integration partners that  
3 were already in existence.

4 Q. (By Mr. Loeser) So the answer to my  
5 question is "yes"? 09:17:22

6 MR. BLUME: Objection. Form.

7 THE DEPONENT: Sorry. I feel  
8 like I've -- I feel like I've answered the  
9 question.

10 I don't -- I don't know what 09:17:31  
11 Mark Zuckerberg knew. He was aware that the -- he  
12 would have been aware. And we've seen the email  
13 sent to him, that made him aware of what the  
14 changes were. But I don't know what he would have  
15 known about the plans to continue with integration 09:17:49  
16 partners and so on.

17 Q. (By Mr. Loeser) And as Facebook's  
18 corporate -- sorry. Go ahead.

19 A. Sorry. Go ahead.

20 Q. As Facebook's corporate designee today, 09:18:02  
21 tell the jury -- isn't it true that Facebook knew  
22 that certain app developers and partners with  
23 nonstandard platform agreements would be given  
24 continued access to user friends data after  
25 Graph API version 2 was implemented? 09:18:19

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1 MR. BLUME: Objection. Form. 09:18:21

2 THE DEPONENT: The changes announced at

3 F8 2014 reflected major changes to the Facebook

4 developer platform for most apps and most

5 developers a significant change to the way the 09:18:37

6 platform worked.

7 Facebook had relationships with entities

8 that built integrations into devices, mobile phones

9 and operating systems that provided great value to

10 users and those were planned to continue. 09:18:59

11 Q. (By Mr. Loeser) And Mr. Cross, I'd

12 appreciate it if you could answer the question.

13 I've asked you a yes-or-no question about what

14 Facebook knew. And I can have the question read

15 back, if you want. But I would like you to answer 09:19:14

16 the question I asked.

17 And that question is, as Facebook's

18 corporate designee today, tell the jury, isn't it

19 true that Facebook knew that certain app developers

20 and partner with nonstandard platform agreements 09:19:26

21 would be given continued access to user friend data

22 after Graph API version 2 was implemented?

23 MR. BLUME: Objection. Form.

24 THE DEPONENT: There were -- it was -- it

25 was expected that, as with many cases and many 09:19:47

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1 companies, that there would be experiences that we 09:19:54  
2 wanted certain developers to build that would not  
3 be possible via the standard public platform, and  
4 we wanted those integrations to -- to continue  
5 providing value to users, developers and Facebook. 09:20:11

6 Q. (By Mr. Loeser) And I appreciate that  
7 explanation, but that was not the question I asked  
8 you.

9 I'm asking you about what Facebook knew.  
10 And I would like you to answer my question about 09:20:21  
11 what Facebook knew at the time Mr. Zuckerberg made  
12 his statements at the F8.

13 Would you like me to read the question  
14 again?

15 A. Yes. Please read the question again. 09:20:34

16 Q. As Facebook's corporate designee, tell  
17 the jury, isn't it true that Facebook knew that  
18 certain app developers and partners with  
19 nonstandard platform agreements would be given  
20 continued access to user friend data after 09:21:04  
21 Graph API version 2 was implemented?

22 A. Facebook had agreements with certain  
23 developers that allowed them to build experiences  
24 that had continued access to friend information for  
25 a period of time and that was planned to continue. 09:21:31

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1 Q. So the answer to my question is, yes, at 09:21:38  
2 the time Mr. Zuckerberg made his statements,  
3 Facebook knew that certain partners would continue  
4 having access to friend data after Graph API  
5 version 2 was implemented, correct? 09:21:52

6 MR. BLUME: Objection. Form.

7 THE DEPONENT: Certain appli- -- sorry.  
8 Say again, Rob.

9 MR. BLUME: I objected to the form of the  
10 question. 09:22:03

11 THE DEPONENT: And I feel like I'm  
12 answering your question -- I feel like I've  
13 answered your question a few times now.

14 SPECIAL MASTER GARRIE: No. Answer the  
15 question yes or no. He's asking you a yes-or-no 09:22:10  
16 question.

17 It's not that complicated. He's saying,  
18 here the question, as a corporate designee, is the  
19 answer yes or no. If you can't answer it as yes or  
20 no, state such. 09:22:23

21 THE DEPONENT: I think I'm confused by  
22 like what -- what does he mean by "Facebook knew"?

23 SPECIAL MASTER GARRIE: Counsel.

24 MR. LOESER: Mr. Cross, you're testifying  
25 on behalf of Facebook. So I'm asking you what 09:22:38

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1 Facebook knew. So what Facebook employees informed 09:22:43

2 management and what management knew.

3 THE DEPONENT: There were people inside

4 the company that knew that --

5 SPECIAL MASTER GARRIE: He gave the 09:23:00

6 explanation of "knew." So the question is -- he

7 asked you a question. He's told you what "knew"

8 means.

9 Is the answer yes or no, or you don't

10 know. But you can answer it. 09:23:08

11 THE DEPONENT: I mean, I -- I -- I don't

12 know what "did Facebook knew" means, right. Did --

13 did -- how did the -- the -- the company know.

14 SPECIAL MASTER GARRIE: Well, you're

15 representing the company today as a designee of the 09:23:22

16 company.

17 THE DEPONENT: Right.

18 SPECIAL MASTER GARRIE: Did the company

19 have knowledge -- Counsel Loeser is asking did

20 Facebook itself have knowledge or individuals 09:23:31

21 therein have knowledge.

22 I think its confusion is around what you

23 mean by "Facebook knew." So maybe you can explain

24 to him, if that's not clear.

25 Q. (By Mr. Loeser) Facebook operates 09:23:44

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1 through its employees, right? 09:23:46

2 A. Facebook has employees, yes.

3 Q. And employees are assigned certain  
4 responsibilities as employees?

5 A. Employees tend to have job titles. 09:24:01

6 Q. Okay. And some employees were  
7 responsible for determining which apps and partners  
8 would continue to have access to friend data after  
9 Graph AP one version 2 was implemented, right?

10 A. There were people working on the platform 09:24:16  
11 partnership team who were responsible for the  
12 device integration partners and the integration  
13 partners.

14 Q. And the -- the knowledge that they  
15 developed was communicated to people with 09:24:28  
16 management level authority; isn't that right?

17 MR. BLUME: Objection. Form.

18 THE DEPONENT: There are emails with  
19 conversations on about what was going to happen and  
20 what could happen. And there were various levels 09:24:44  
21 of management on these email threads.

22 Q. (By Mr. Loeser) And we talked about some  
23 of those people. Eddie O'Neil, for example. KP,  
24 for example.

25 Those were people who were aware of which 09:24:56

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1 apps and partners would continue to have access to 09:24:58  
2 deprecated permissions after Graph API one -- API  
3 version 2 was implemented, right?

4 A. The integration -- so they were aware of  
5 the integration partners. And -- 09:25:13

6 SPECIAL MASTER GARRIE: The answer is  
7 yes. We looked at the emails. You can just answer  
8 the question asked. We all looked at the emails.

9 THE DEPONENT: Yes, we looked at emails.

10 SPECIAL MASTER GARRIE: So they knew -- 09:25:23

11 Q. (By Mr. Loeser) And we looked at an  
12 email --

13 SPECIAL MASTER GARRIE: -- right?

14 Keep going, Counsel.

15 Q. (By Mr. Loeser) We looked at an email as 09:25:30  
16 well in which Eddie O'Neil communicated with  
17 Mark Zuckerberg directly on this topic; is that  
18 right?

19 A. We looked at an email that Eddie sent to  
20 Mark which talked about the changes. But that 09:25:39  
21 email didn't contain anything about apps that would  
22 continue to have access.

23 Q. It refers to the privatization of APIs,  
24 right?

25 A. That email does use the term 09:25:53

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1 "privatization." 09:25:55

2 Q. And that was a term used to describe  
3 certain partners that would continue to have access  
4 to information that was otherwise deprecated on the  
5 new platform, right?

09:26:05

6 A. Privatization could be used to suggest an  
7 API that was no longer available to public  
8 developers.

9 Q. So Mr. Cross, in light of all of the  
10 materials we went through that show discussion of  
11 which partners would continue to have access to  
12 friends data after the implementation of Graph API  
13 version 2, it is true, is it not, that Facebook  
14 knew that certain apps and partners would continue  
15 to have access to friend data after the  
16 implementation of Graph API version 2, correct?

09:26:19

09:26:35

17 MR. BLUME: Objection. Form.

18 THE DEPONENT: There were people at  
19 Facebook who knew that there would be apps that  
20 continued to have access -- to some apps that had  
21 continued access to some information about friends  
22 after the public surface area apps had been  
23 migrated to API version 2.

09:26:53

24 Q. (By Mr. Loeser) And Facebook knew that  
25 some sensitive and strategic partners would be

09:27:09

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1 given continued access to user friend information 09:27:12  
2 after Graph API -- after Graph API version 2 was  
3 implemented, correct?

4 MR. BLUME: Objection. Form and scope.

5 THE DEPONENT: There were a number of 09:27:24  
6 integration partners and device integrations, and  
7 they were going to continue to have access to  
8 friend information in order to build Facebook  
9 replacement clients and other experiences after API  
10 version 2 had been adopted by the public developer 09:27:44  
11 platform.

12 Q. (By Mr. Loeser) And Facebook knew that  
13 at the time that Mr. Zuckerberg made his comments  
14 about the deprecation of friend permissions at the  
15 April 30th, 2014, F8, right? 09:27:59

16 THE DEPONENT: Sorry, Rob. Did you say  
17 something?

18 MR. BLUME: Objection to form.

19 THE DEPONENT: In April 2014, there were  
20 no plans to deprecate the device integration or 09:28:14  
21 integration partners that were already in  
22 existence.

23 Q. (By Mr. Loeser) And Facebook knew that  
24 at the time Mr. Zuckerberg made his statements,  
25 correct? 09:28:26

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5 Q. And they knew that at the time 09:28:38  
6 Mr. Zuckerberg made his public statements on  
7 April 30th, 2014, correct?

12 Q. And Mr. Cross, you are avoiding answering  
13 my question about knowledge. And I am asking you  
14 the same question about knowledge because you're  
15 not answering it. 09:29:07

16 And I would like you answer the question  
17 about what Facebook knew at the time Mr. Zuckerberg  
18 made those statements. And we went through a few  
19 minutes of explaining what I meant by what Facebook  
20 knew, so there's no confusion about that now. So 09:29:17  
21 if you could please answer my question.

22 Facebook knew that app developers and  
23 partners, who were considered sensitive and  
24 strategic partners, would be given continued access  
25 to user friend data after Graph API version 2 was 09:29:31

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1 implemented, correct? 09:29:36

2 MR. BLUME: Objection. Form and scope.

3 SPECIAL MASTER GARRIE: Answer the

4 question.

5 Sorry. Go ahead, Counsel Blume. 09:29:39

6 MR. BLUME: I'm sorry. Objection to form

7 and scope to that question.

8 SPECIAL MASTER GARRIE: Noted for the

9 record. Overruled.

10 Answer the question. 09:29:47

11 THE DEPONENT: There were partners --

12 SPECIAL MASTER GARRIE: "No," or

13 "Correct," or "I don't know." Those are your

14 choices. Or "I cannot answer the question as

15 asked." However you want to say it, those are your 09:30:00

16 choices.

17 THE DEPONENT: I cannot answer the

18 question as asked because of the -- the definition

19 used in it around sensitive and strategic, which is

20 not established or defined. 09:30:14

21 SPECIAL MASTER GARRIE: Okay. Fair

22 enough.

23 There you go, Counselor.

24 Q. (By Mr. Loeser) And Facebook knew, at

25 the time Mr. Zuckerberg made -- gave his keynote 09:30:27

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1 address at the April 30th, 2014, F8, that app 09:30:32  
2 developers and partners with private APIs would be  
3 given continued access to user friend data after  
4 Graph API version 2 was implemented, correct?

5 A. Can you ask the top of that question 09:30:49  
6 again. It was quite a long one.

7 Q. Mr. Cross, Facebook knew that app  
8 developers and partners with private APIs would be  
9 given continued access to friend user data after  
10 Graph API version 2 was implemented, correct? 09:31:05

11 MR. BLUME: Objection. Form.

12 THE DEPONENT: Facebook knew that there  
13 were integration partners and device integrations  
14 that would continue to have access to friends  
15 information after the public API surface area had 09:31:20  
16 been migrated to version 2.

17 Q. (By Mr. Loeser) Mr. Zuckerberg said  
18 "we're going to make it so that now everyone has to  
19 choose to share their own data with an app  
20 themselves" right? 09:31:34

21 A. You're reading from his transcript. That  
22 seems to be what he said.

23 Q. And I'm -- I'm going to try and ask this  
24 question really clearly so you can answer very  
25 clearly. And this is a question for you that I 09:31:47

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1 would like you to explain to the jury. Okay. 09:31:50

2 Considering all the apps and partners

3 that would continue to have access to user friend

4 data after Graph API version 2 was implemented,

5 Facebook knew that Mr. Zuckerberg's statement that 09:32:03

6 "we're going to make it so that now everyone has to

7 choose to share their own data with an app

8 themselves" was an untrue statement, correct?

9 MR. BLUME: Objection to scope. Form.

10 Asked and answered. 09:32:18

11 THE DEPONENT: I -- I -- Mark is talking

12 about the public surface area of the platform, and

13 over time this statement that he made about that

14 became true. The friend permissions were

15 deprecated for all apps, for all people, in 09:32:37

16 March 2018.

17 Q. (By Mr. Loeser) And Mr. Zuckerberg did

18 not say in his statement that over the course of

19 several years we're going to make it so that

20 everyone has to choose to share their own data with 09:32:54

21 an app themselves, right?

22 MR. BLUME: Objection. Form.

23 THE DEPONENT: We've looked at the

24 transcript of what Mark said.

25 Q. (By Mr. Loeser) And he didn't say that, 09:33:04

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1 did he? 09:33:06

2 MR. BLUME: Objection. Form.

3 THE DEPONENT: He didn't say the words

4 that you just said.

5 MR. LOESER: We're going to go to a new 09:33:11

6 exhibit.

7 MR. BLUME: Is this a good time for a

8 break, Derek?

9 MR. LOESER: You know, if we could

10 just -- if it's okay, I wouldn't mind powering 09:33:58

11 through, if it's okay with Mr. Cross, because I

12 don't have a lot of time on -- on my end. And I'd

13 like to try and cover as much as we can this

14 evening. But really, it's up to Mr. Cross, if he

15 needs a couple minutes. 09:34:09

16 THE DEPONENT: Can I take a three-minute

17 quick bio break?

18 MR. LOESER: Sure. No problem. Make it

19 five.

20 THE DEPONENT: Thank you. 09:34:17

21 MR. LOESER: Yeah.

22 THE VIDEOGRAPHER: Okay. We're off the

23 record. It's 9:34 p.m.

24 (Recess taken.)

25 THE VIDEOGRAPHER: We're back on the 09:34:22

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1 record. It's 9:47 p.m. 09:47:24

2 MR. LOESER: Before we took a break,  
3 Mr. Cross, I believe we introduced the next  
4 exhibit, which we'll put up on the screen.

5 (Exhibit 343 was marked for 09:47:36  
6 identification by the court reporter and is  
7 attached hereto.)

8 MR. LOESER: And this is an email string,  
9 a fairly long one. The top email is from  
10 Steven Elia, dated 3/24/2016. "Subject: Re: 09:47:48  
11 Changing App Settings // Friend Permissions."

12 Q. (By Mr. Loeser) Do you see that?

13 A. I do.

14 Can I -- can I make sure I've got my -- a  
15 copy here so I can -- I have it. Okay. I have it. 09:48:09

16 Q. And -- and there's a number of  
17 recipients --

18 A. Sorry. I -- I don't -- 343.

19 My 343 is a -- is the keynote video from  
20 Mark. 09:48:22

21 Q. So let's see what number this is. This  
22 would be the next exhibit after --

23 A. I just want to make sure --

24 343. Okay. Yeah, I have it. I have it.

25 Q. Okay. And so we're looking at the -- the 09:48:37

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1 "To" line and there's -- it's from Steven Elia. 09:48:39

2 Who is Steven Elia?

3 A. Steven Elia is an engineering manager on  
4 the Facebook platform team.

5 Q. Okay. And one of the recipients -- 09:48:50

6 there's some names on here like Eddie O'Neil and KP  
7 that were -- that we've already talked about.

8 There's another person on here, Johanna Peace.

9 Do you know who she is?

10 A. Johanna Peace was somebody who worked in 09:49:02  
11 the communications department.

12 Q. And so if we go to the end of this

13 string, it is an email from Johanna Peace to

14 Eddie O'Neil, Monica Tsang, Amee Kamdar,

15 Jonathan Coleman, Steve Elia and Shirine Sajjadi, 09:49:16

16 dated March 24th, 2016.

17 Do you see that?

18 A. That's right.

19 Q. And Ms. Peace says, at the beginning of

20 her email, "Hi all, You may have seen this article 09:49:33

21 in US Today which takes a pretty negative stance

22 toward Login, partly based on a wrong assumption

23 from looking at App Settings that friends can share

24 all your info with apps."

25 Do you see that? 09:49:47

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1 A. I see that. 09:49:48

2 Q. And at the time was it, in fact,  
3 incorrect that friends could share all your info  
4 with apps?

5 MR. BLUME: Objection. Form. 09:49:59

6 THE DEPONENT: Sorry. Was it incorrect  
7 that friends -- like -- I just want to get that  
8 double negative right.

9 Q. (By Mr. Loeser) Well, let me -- let me  
10 clean that up. 09:50:11

11 So as we've spent a lot of time talking  
12 about, there were a number of apps and partners  
13 that were whitelisted and continued to have access  
14 to friend data as of March 24th, 2016; is that  
15 right? 09:50:23

16 A. There were apps that still had access  
17 to -- to friend permissions and some friend  
18 information in 2016, yes.

19 Q. Okay. So -- so at the time that this was  
20 written, there were -- friends could share all of 09:50:39  
21 their friends info with some apps, right?

22 A. There were some apps that still had  
23 access to the friend permissions and APIs that  
24 allowed the apps to access some friend information.

25 Q. Okay. And then in the second paragraph 09:50:57

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1 of her email, she writes "Matt (copied) has been 09:51:00  
2 working to push back against US Today's negative  
3 claims and we've been emphasizing that friends  
4 cannot actually share all your info with apps, but  
5 the editors are having a hard time believing us, 09:51:13  
6 since they noticed that App Settings appear to  
7 contradict this."

8 Do you see that?

9 A. I see that.

10 Q. And she then writes "Given that this has 09:51:28  
11 been a persistent issue confusing press and people,  
12 I wanted to raise a few questions."

13 Do you see that?

14 A. I see that.

15 Q. And in her second paragraph below that 09:51:38  
16 she writes, "In the meantime, Matt and I are  
17 looking for a way to explain to USAT why the App  
18 Settings appear this way, so I wanted to see what"  
19 the "group is comfortable saying."

20 And I want you to look at and could you 09:51:54  
21 read the next sentence that she writes.

22 A. She says "I know we have not been  
23 publicly forthcoming that we have whitelisted  
24 certain apps."

25 Q. And so at the time was it true that 09:52:06

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1 Facebook had not been publicly forthcoming with the 09:52:08  
2 fact that it had whitelisted certain apps?

3 MR. BLUME: Objection. Form and scope.

4 THE DEPONENT: It -- I can't answer -- I  
5 can't answer what Facebook -- all of Facebook's 09:52:22  
6 statements were about that. It's hard for me to  
7 answer that question.

8 But at the time there were still  
9 applications that -- that had access to some friend  
10 information. 09:52:36

11 Q. (By Mr. Loeser) And that hadn't been  
12 communicated publicly; is that right?

13 MR. BLUME: Objection. Form. Scope.

14 THE DEPONENT: I don't -- I -- I don't  
15 know if there had been -- if there had been 09:52:45  
16 communications about that or -- or not.

17 Q. (By Mr. Loeser) And then she writes "But  
18 could we say something like: 'Only a few apps have  
19 access to this information, for example, to provide  
20 a Facebook experience on platforms where there is 09:52:57  
21 no Facebook app.' I believe that's one of a few  
22 reasons apps are whitelisted, but can this group  
23 let me know thoughts / additional context?"

24 Do you see that?

25 A. I do see that. 09:53:11

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1 Q. And if we move up the string to an email 09:53:12  
2 from Reagan Williams to Eddie O'Neil and  
3 Johanna Peace, among others -- Johanna Peace -- she  
4 writes on March 24th, 2016, "I found there are  
5 approx 80 apps still accessing v1.0 of the API, 09:53:40  
6 with the largest bulk of them being from phone  
7 manufacturers & Apple, both of which we are under  
8 contract to continue supporting. Outside of these  
9 apps, nobody appears to have accessed v1.0 friends  
10 data edges in the last 30 days." 09:53:52

11 Do you see that?

12 A. I do see that.

13 Q. And then she also writes "However, I did  
14 uncover a few apps that were not part of our  
15 original Capability whitelists, but still 09:54:01  
16 maintained access to v1.0 (such as: Socialist), but  
17 I've confirmed" that "these apps are only accessing  
18 Page feeds and not friends data."

19 Do you see that?

20 A. I see that. 09:54:16

21 Q. And page feeds did communicate some  
22 friends data; isn't that right?

23 MR. BLUME: Objection. Form.

24 THE DEPONENT: Page feeds allowed apps to  
25 access the information about posts on a page, which 09:54:28

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1 may have included the people who commented or liked 09:54:33  
2 the posts on that page.

3 Q. (By Mr. Loeser) Okay. And then if we  
4 move up the string a bit, Johanna Peace says, on  
5 March 24, 2016, in her email to Steven Elia, 09:54:42  
6 Reagan Williams, Eddie O'Neil and others, "Thanks  
7 both. So given these findings, does the response I  
8 shared below in #2 seem true/fair to share with a  
9 reporter? 'Only a few apps have access to this  
10 information, for example, to provide a Facebook 09:55:00  
11 experience on platforms where there is no Facebook  
12 app.'"

13 Do you see that?

14 A. I see that.

15 Q. And then if you move up the string above 09:55:11  
16 that, KP says, on March 24th, 2016 -- why don't you  
17 read what -- what KP said.

18 A. So what's there is, "In the spirit of  
19 fairness," I would not say anything around the  
20 lines that 'only a few apps have access to this 09:55:34  
21 information.' Instead I would suggest that this  
22 option under the App Settings is an artifact of  
23 what used to be true and enforce our messaging that  
24 apps can no longer access friend\_\*permissions."

25 Q. Now, this statement -- this messaging 09:55:49

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1       that apps can no longer access friend\_\*permissions,                   09:55:53  
2       that wasn't actually true at the time that he wrote  
3       that, right?

4               MR. BLUME:   Objection.   Form.   And scope.

5               THE DEPONENT:   In 2016, there were some                   09:56:06  
6       apps that still had access to -- to friends  
7       information and friend permissions.

8               Q.    (By Mr. Loeser)   Okay.   So this  
9       statement, no apps can no longer access friend  
10      permissions, is not a true statement, is it -- or                   09:56:20  
11      let me put it a different way.

12              This statements, no acts -- no -- this  
13      statement that apps can no longer access friend  
14      permissions is not an accurate statement; is that  
15      right?   09:56:31

16              MR. BLUME:   Objection.   Form.   Scope.

17              THE DEPONENT:   In 2016, there were apps  
18      that still had access to some friend permissions  
19      and information.

20              Q.    (By Mr. Loeser)   Mr. Cross, I -- I'm               09:56:43  
21      hoping to avoid a long time getting a yes or no to  
22      a yes-or-no question here.

23              So if -- if we could read the question  
24      back, and if you could answer the question yes or  
25      no, I'd appreciate it.   09:56:54

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1 SPECIAL MASTER GARRIE: Instructing the 09:57:00  
2 witness to answer the question yes or no.

3 THE DEPONENT: Can you read the question  
4 back for me, please.

5 (Record read as follows: 09:57:12  
6 "QUESTION: this statements, no  
7 acts -- no -- this statement that  
8 apps can no longer access friend  
9 permissions is not an accurate  
10 statement; is that right?") 09:57:12

11 THE DEPONENT: Where -- where is the  
12 statement -- where is the statement that -- sorry.

13 MR. LOESER: And I'm sorry, Rebecca, let  
14 me -- I -- it's been a long day and I'm sure it's  
15 no fun to try and recreate my speaking as quickly 09:57:38  
16 as I am.

17 So let me ask the question again. And  
18 Mr. Cross, if you could please answer it yes or  
19 not, I'd appreciate it.

20 Q. (By Mr. Loeser) The question is, the 09:57:47  
21 statement in the email from KP on March 24th, 2016,  
22 that apps can no longer access friend permissions  
23 is not an accurate statement, is it?

24 MR. BLUME: Objection. Form. Scope.

25 SPECIAL MASTER GARRIE: Yes or no. 09:58:08

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1 THE DEPONENT: There were some apps that 09:58:17  
2 could access --

3 SPECIAL MASTER GARRIE: I'm instructing  
4 the witness to answer the question yes or no.

5 MR. BLUME: Mr. Garrie, if there's no yes 09:58:26  
6 or no, can he answer that way as well?

7 SPECIAL MASTER GARRIE: If he -- if he's  
8 not able to answer the question, he can say "I'm  
9 not able to answer the question" certainly. But  
10 either "Yes," "No," or "I can't answer the 09:58:34  
11 question."

12 Any time you can't answer a question, say  
13 "I can't answer." But he's asking you yes or no,  
14 so -- or you can't answer.

15 THE DEPONENT: It -- it doesn't make -- 09:59:00  
16 it doesn't make a statement here about like all  
17 apps or any apps or some apps. It just says apps.  
18 And at this point, you know, the vast majority of  
19 apps could no longer access friend permissions.

20 So it doesn't -- it doesn't -- the 09:59:14  
21 statement isn't qualified enough for me to give a  
22 yes-or-no answer.

23 SPECIAL MASTER GARRIE: Okay.

24 Q. (By Mr. Loeser) Mr. Cross -- sorry,  
25 Special Master Garrie. 09:59:25

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1 SPECIAL MASTER GARRIE: No. Go ahead, 09:59:27

2 Counsel.

3 Q. (By Mr. Loeser) On March 14th, 2016, it  
4 was not true that apps can no longer access friend  
5 permissions, right? 09:59:38

6 MR. BLUME: Asked and answered. Scope.  
7 And form.

8 THE DEPONENT: There were some apps in  
9 2016 that could still access friend permissions.

10 Q. (By Mr. Loeser) And that is not what KP 10:00:01  
11 was indicating Ms. Peace should report to  
12 USA Today; is that right?

13 MR. BLUME: Objection. Form. Scope.

14 THE DEPONENT: I can't -- I can't confirm  
15 what KP's statement of intent was here. This is 10:00:16  
16 him writing not the -- this is him writing.

17 Q. (By Mr. Loeser) So Mr. Cross, he's  
18 responding to an email in which Ms. Peace is asking  
19 if she should say only a few apps have access to  
20 this information, is he not? 10:00:35

21 MR. BLUME: Objection. Form. Scope.  
22 Argumentative.

23 THE DEPONENT: He's certainly replying to  
24 an email from Johanna.

25 Q. (By Mr. Loeser) Okay. And does he not 10:00:47

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1 say "In the spirit of fairness I would not 10:00:48  
2 say anything around the lines that 'only a few apps  
3 have access to this information'?"  
4 A. That's what's on the page.  
5 Q. And does he not say that he would 10:00:59  
6 "suggest that this option under the App Settings is  
7 an artifact of what used to be true and enforce our  
8 messaging that apps can no longer access  
9 friend\_\*permissions"?  
10 A. Again, those words are written on the 10:01:14  
11 page.  
12 MR. LOESER: We can go to the next  
13 exhibit. And I think this will be the last thing  
14 that we do today to abide by your request that we  
15 stop at the -- the late hour that it is now for 10:01:34  
16 you.  
17 THE DEPONENT: I'd appreciate that.  
18 Thank you.  
19 (Exhibit 344 was marked for  
20 identification by the court reporter and is 10:01:38  
21 attached hereto.)  
22 MR. LOESER: So this as -- okay. This  
23 will be marked Exhibit 344.  
24 Q. (By Mr. Loeser) And Mr. Cross, I'm  
25 showing you what's been marked as Exhibit 344. And 10:02:21

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1 it's quite a long email string and -- and not to 10:02:23  
2 worry because I don't have questions about the  
3 whole thing.

4 I will note for the record that a number  
5 of the pages are -- nothing can be read because of 10:02:29  
6 the redactions that are on the pages.

7 And -- but if we go to the top email in  
8 the thread, it's an email from Johanna Peace  
9 to Joshua Smith, yourself, and Eddie O'Neil.

10 Do you see that? 10:02:51

11 A. I see that.

12 Q. And the date on the email is  
13 September 11, 2015, and the subject is "Re:  
14 [a/c priv] Re: WSJ story on API migration."

15 Do you see that? 10:03:14

16 A. I see that.

17 Q. And is there a lawyer among the -- to  
18 your knowledge, or any of the persons from or to  
19 whom this email sent, a lawyer?

20 THE DEPONENT: Sorry. Say that -- say 10:03:35  
21 that again, Rob. You're --

22 MR. BLUME: Sorry. Objection. Scope.

23 Q. (By Mr. Loeser) Yeah. The recipients  
24 are Joshua Smith.

25 Do you know who he is? 10:03:42

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1 Q. And so this appears to be information 10:04:54  
2 that -- that she was developing with regard to a  
3 Wall Street Journal story on API migration, right?

4 A. That's correct.

5 Q. And API migration is a reference to the 10:05:04  
6 changes to the APIs with the new platform?

7 A. That's correct.

8 Q. Okay. And so in -- in her email, she  
9 presents the information that it appears that she  
10 had prepared for the Wall Street Journal. 10:05:20

11 She states "Under API 2.0, app developers  
12 can get the following info about a user who logs in  
13 with their Facebook account. Some caveats apply."

14 Do you see that?

15 A. I do. 10:05:33

16 Q. And she has a couple different  
17 categories. One is, "This is data that used to be  
18 available by default and now can only be accessed  
19 with Facebook's approval."

20 Do you see that? 10:05:45

21 A. I see that.

22 Q. And then she has a heading that says  
23 "This data used to be available through Facebook's  
24 API and is no longer available, period. This  
25 includes 30 different data points about your 10:05:56

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1 friends." 10:05:58

2 A. I see that.

3 Q. Now, if you look at the bolded text that

4 I just read, at the time that statement -- at the

5 time this email was sent on September 11th, 2015, 10:06:13

6 was it true that this data used to be available

7 through Facebook's APIs and is no longer available,

8 period?

9 A. No, this information was still available

10 to some -- some whitelisted applications at the 10:06:27

11 time.

12 Q. So if we go to page 10 in this string,

13 which is further back in time, there's an earlier

14 version of the information that Ms. Peace had put

15 together. And this is dated September 11th, 2015, 10:06:50

16 but earlier in that day. This is at 12:39, and the

17 other message we just went through was at 2:10.

18 We see that same heading towards the

19 bottom of the page --

20 A. I'm sorry. Could you give me the Bates 10:07:04

21 number of the page you're looking at?

22 Q. Yeah. Yeah.

23 FB-CA-MDL-01169164.

24 A. Got it. Thank you.

25 Q. And you'll see the same bolded heading, 10:07:16

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1 "This data used to be available through Facebook's 10:07:18  
2 API and is no longer available. This includes 30  
3 different data points about your friends." [as  
4 read]

5 And -- and there's a -- appears to be a 10:07:25  
6 comment and the initials for the comments are SC.

7 Is that you?

8 A. I think that would have been me.

9 Q. Okay. And you write "we may need to be  
10 careful about the finality here. There are still 10:07:37  
11 apps on v1 (extended deprecation window) and we may  
12 have apps under contract which retain access to  
13 this information. Don't know if we need to explain  
14 that in this context."

15 Do you see that? 10:07:55

16 A. I see that.

17 Q. So that's consistent with the answer you  
18 just gave about that bolded heading not being  
19 accurate at the time, right?

20 MR. BLUME: Objection. Form. 10:08:06

21 THE DEPONENT: It's consistent with my  
22 previous statement that at this time there were  
23 still apps that had access to some friends  
24 information via the API.

25 Q. (By Mr. Loeser) And you write "Don't 10:08:24

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1 know if we need to explain that in this context." 10:08:24

2 And it is true, is it not, that -- that

3 that additional information that you indicate in

4 that parenthetical was not communicated to the

5 Wall Street Journal in connection with this story? 10:08:39

6 MR. BLUME: Objection. Form. And scope.

7 THE DEPONENT: I can't say for certain

8 what information was shared with -- with the

9 Wall Street Journal.

10 Q. (By Mr. Loeser) Now, in that same 10:09:05

11 comment from you, there is another comment from JP,

12 and that -- those are the initials of

13 Johanna Peace, right?

14 A. That's correct.

15 Q. And do you see that she says "Don't think 10:09:19

16 we need to go into that detail here; we can always

17 clarify if asked."

18 Do you see that?

19 A. I see that.

20 Q. And then you respond to that with another 10:09:27

21 comment, and it just says, "[SC: sgtm!]"

22 What does "sgtm" mean?

23 A. It sounds good to me.

24 MR. LOESER: I think we can conclude for

25 the day, Mr. Cross. 10:09:44

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1 And, again, I do want to -- I do 10:09:45

2 appreciate the time you've spent.

3 And we can go off the record.

4 THE VIDEOGRAPHER: Off the record. It's

5 10:09 p.m. 10:09:53

6 (TIME NOTED: 10:09 p.m.)

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1 I, SIMON CROSS, do hereby declare under  
2 penalty of perjury that I have read the foregoing  
3 transcript; that I have made any corrections as  
4 appear notes; that my testimony as contained  
5 herein, as corrected, is true and correct.

6 Executed this \_\_\_\_ day of \_\_\_\_\_,  
7 2022, at \_\_\_\_\_, \_\_\_\_\_.

8  
9  
10  
11 \_\_\_\_\_  
SIMON CROSS

12  
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1 I, Rebecca L. Romano, a Certified Shorthand  
2 Reporter of the State of California, do hereby  
3 certify:

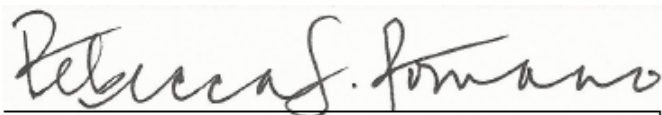
4 That the foregoing proceedings were taken  
5 before me remotely at the time and place herein set  
6 forth; that any deponents in the foregoing  
7 proceedings, prior to testifying, were administered  
8 an oath; that a record of the proceedings was made  
9 by me using machine shorthand which was thereafter  
10 transcribed under my direction; that the foregoing  
11 transcript is true record of the testimony given.

12 Further, that if the foregoing pertains to the  
13 original transcript of a deposition in a Federal  
14 Case, before completion of the proceedings, review  
15 of the transcript [ ] was [X] was not requested.

16 I further certify I am neither financially  
17 interested in the action nor a relative or employee  
18 of any attorney or any party to this action.

19 IN WITNESS WHEREOF, I have this date  
20 subscribed my name.

21  
22 Dated: May 17, 2022

23   
24

Rebecca L. Romano, RPR, CCR

25 CSR. No 12546

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DEREK W. LOESER, ESQ.

dloeser@kellerrohrback.com

May 17, 2022

IN RE: FACEBOOK, INC., CONSUMER USER PROFILE LITIGATION

MAY 12, 2022, SIMON CROSS, VOLUME II, JOB NO. 5219195

The above-referenced transcript has been  
completed by Veritext Legal Solutions and  
review of the transcript is being handled as follows:

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Contact Veritext  
to schedule a time to review the original transcript at  
a Veritext office.

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Locked .PDF  
Transcript - The witness should review the transcript and  
make any necessary corrections on the errata pages included  
below, notating the page and line number of the corrections.  
The witness should then sign and date the errata and penalty  
of perjury pages and return the completed pages to all  
appearing counsel within the period of time determined at  
the deposition or provided by the Code of Civil Procedure.

\_\_\_ Waiving the CA Code of Civil Procedure per Stipulation of  
Counsel - Original transcript to be released for signature  
as determined at the deposition.

\_\_\_ Signature Waived - Reading & Signature was waived at the  
time of the deposition.

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1     \_\_\_ Federal R&S Requested (FRCP 30(e)(1)(B)) - Locked .PDF  
2     Transcript - The witness should review the transcript and  
3     make any necessary corrections on the errata pages included  
4     below, notating the page and line number of the corrections.  
5     The witness should then sign and date the errata and penalty  
6     of perjury pages and return the completed pages to all  
7     appearing counsel within the period of time determined at  
8     the deposition or provided by the Federal Rules.  
9     \_X\_Federal R&S Not Requested - Reading & Signature was not  
10    requested before the completion of the deposition.

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IN RE: FACEBOOK, INC., CONSUMER USER PROFILE LITIGATION  
SIMON CROSS, VOLUME II, JOB NO. 5219195

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WITNESS

Date

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[today - unclear]

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[unclear - users]

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[working - zuckerberg's]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.



VERITEXT LEGAL SOLUTIONS  
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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HIGHLY CONFIDENTIAL

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

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This document relates to:  
ALL ACTIONS  
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ZOOM DEPOSITION OF FACEBOOK's 30(b)(6)  
CORPORATE REPRESENTATIVE - SIMON CROSS  
(Reported Remotely via Video & Web Videoconference)  
London, England (Deponent's location)  
Monday, June 6, 2022  
Volume III

STENOGRAPHICALLY REPORTED BY:

REBECCA L. ROMANO, RPR, CSR, CCR  
California CSR No. 12546  
Nevada CCR No. 827  
Oregon CSR No. 20-0466  
Washington CCR No. 3491  
JOB NO. 5265189  
PAGES 496 - 724

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HIGHLY CONFIDENTIAL

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

-----  
This document relates to:  
ALL ACTIONS  
-----

DEPOSITION OF SIMON CROSS, taken on  
behalf of the Plaintiffs, with the deponent located  
in London, England, commencing at  
3:36 p.m., Monday, June 6, 2022, remotely reported  
via Video & Web videoconference before  
REBECCA L. ROMANO, a Certified Shorthand Reporter,  
Certified Court Reporter, Registered Professional  
Reporter.

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APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

KELLER ROHRBACK L.L.P.

BY: DEREK W. LOESER

BY: ADELE A. DANIEL

BY: EMMA WRIGHT

Attorneys at Law

1201 Third Avenue

Suite 3200

Seattle, Washington 98101

(206) 623-1900

dloeser@kellerrohrback.com

adaniel@kellerrohrback.com

ewright@kellerrohrback.com

/////

HIGHLY CONFIDENTIAL

APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

BLEICHMAR FONTI & AULD LLP

BY: LESLEY E. WEAVER

BY: MATTHEW MELAMED

BY: ANNE K. DAVIS

BY: JOSHUA SAMRA

Attorneys at Law

555 12th Street

Suite 1600

Oakland, California 94607

(415) 445-4003

lweaver@bfalaw.com

mmelamed@bfalaw.com

adavis@bfalaw.com

jsamra@bfalaw.com

/////

HIGHLY CONFIDENTIAL

1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)

3

4 For Facebook, Inc.:

5 GIBSON, DUNN & CRUTCHER LLP

6 BY: AUSTIN SCHWING

7 BY: ROSEMARIE T. RING

8 Attorneys at Law

9 555 Mission Street

10 Suite 3000

11 San Francisco, California 94105-0921

12 (415) 393-8200

13 aschwing@gibsondunn.com

14 rring@gibsondunn.com

15 and

16 BY: MATT BUONGIORNO

17 Attorney at Law

18 2001 Ross Avenue

19 Suite 2100

20 Dallas, Texas 75201

21 (214) 698-3204

22 mbuongiorno@gibsondunn.com

23

24

25 //

HIGHLY CONFIDENTIAL

1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)  
3

4 For Facebook, Inc.:

5 GIBSON, DUNN & CRUTCHER LLP

6 BY: HANNAH REGAN-SMITH

7 Attorneys at Law

8 1801 California Street

9 Suite 4200

10 Denver, Colorado 80202-2642

11 (303) 298-5735

12 hregan-smith@gibsondunn.com

13 and

14 BY: PHUNTSO WANGDRA

15 Attorney at Law

16 1881 Page Mill Road

17 Palo Alto, California 94304-1211

18 (650) 849-5206

19 pwangdra@gibsondunn.com

20

21

22

23

24

25 //

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1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)  
3

4 JAMS

5 BY: DANIEL B. GARRIE

6 Special Master

7 555 W. 5th Street

8 32nd Floor

9 Los Angeles, California 90013

10 (213) 253-9706

11 dgarrie@jamsadr.com  
12  
13  
14

15 ALSO PRESENT:

16 Ian Chen, Associate General Counsel,

17 Meta Platforms

18 John Macdonell, Videographer  
19  
20  
21  
22  
23  
24

25 // // // //

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## 1 E X H I B I T S (cont'd)

2 NUMBER PAGE

3 DESCRIPTION

4 Exhibit 408 facebook Newsroom - December 706

5 18, 2018 - Let's Clear Up a

6 Few Things About Facebook's

7 Partners, FB-CA-MDL-01789112

8 - FB-CA-MDL-01789115.

9

10

## 11 PREVIOUSLY MARKED EXHIBITS

12 NUMBER PAGE

13 Exhibit 29 660

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15 Exhibit 128 668

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## HIGHLY CONFIDENTIAL

1 London, England; Monday, June 6, 2022

2 3:36 p.m.

3 ---o0o---

4  
5 THE VIDEOGRAPHER: Okay. We're on the 03:00:36  
6 record. It's 3:36 p.m. London time on June 6th,  
7 2022.

8 This is the deposition of Simon Cross,  
9 Volume 3. We're here in the matter of In Re:  
10 Facebook, Inc. Consumer Privacy User Profile 03:19:04  
11 Litigation. I'm John Macdonell, the videographer  
12 with Veritext.

13 Before the reporter swears the witness,  
14 would counsel please identify themselves, beginning  
15 with the noticing party, please. 03:19:16

16 MR. LOESER: Good morning. Derek Loeser  
17 from Keller Rohrbach. With me is Adele Daniel,  
18 also from Keller Rohrbach.

19 MR. SCHWING: This is Austin Schwing from  
20 Gibson, Dunn & Crutcher for the defendant, and I 03:19:33  
21 also have with me Matt Buongiorno, Ian Chen,  
22 Phuntso Wangdra, and Hannah Regan-Smith.

23 MR. MELAMED: Good morning. This is Matt  
24 Melamed from Bleichmar Fonti & Auld for plaintiffs.  
25 With me are Anne Davis and Josh Samra. 03:19:52

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1 MR. LOESER: And also with me from 03:19:56  
2 Keller Rohrback is Emma Wright.  
3 SPECIAL MASTER GARRIE: Counsel Weaver is  
4 here as well?  
5 MS. WEAVER: Yes. 03:20:14  
6 SPECIAL MASTER GARRIE: Okay.  
7 This is Special Master Daniel Garrie.  
8 I'm here on behalf of the Court.  
9 And, Mr. Cross, I will turn my video off  
10 and mute myself. If I turn my video on or unmute 03:20:21  
11 myself, it is because I want to be seen and I have  
12 something to say or to resolve an issue.  
13 That said, I'm going to turn it over to  
14 the court reporter to kick things off and move  
15 things along. 03:20:34  
16 THE COURT REPORTER: If you could raise  
17 your right hand for me, please.  
18 THE DEPONENT: (Complies.)  
19 THE COURT REPORTER: You do solemnly  
20 state, under penalty of perjury, that the testimony 12:04:19  
21 you are about to give in this deposition shall be  
22 the truth, the whole truth and nothing but the  
23 truth?  
24 THE DEPONENT: I do.  
25 ///// 12:04:19

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1 SIMON CROSS, 12:04:19

2 having been administered an oath, was examined and  
3 testified as follows:

4 EXAMINATION(resumed)

5 BY MR. LOESER: 03:20:55

6 Q. Good morning for me, Mr. Cross. Good  
7 afternoon for you. Thank you for being here.

8 This is a continuation of the 30(b)(6)  
9 deposition that's -- that we started a few weeks  
10 ago, and I will continue to ask you questions about 03:21:09  
11 topics 6 and 7 in the notice, and then there are  
12 some other discrete topics for which you've been  
13 designated, and Mr. Melamed will be examining you  
14 with regard to those topics.

15 And you -- you've been put under oath 03:21:25  
16 again. You understand you're under oath?

17 A. I do.

18 Q. And, Mr. Cross, we sent over some  
19 additional documents a few days ago. Did you have  
20 an opportunity to review those documents to prepare 03:21:39  
21 for your testimony today?

22 A. I did have an opportunity to review them,  
23 yes.

24 Q. And did you do anything else to prepare  
25 for your testimony today other than what you 03:21:48

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1 previously described? 03:21:50

2 A. I had some more conversations with --  
3 with our legal team to review the documents, and I  
4 also had conversations with a few additional  
5 Facebook employees to help me prepare. 03:22:03

6 Q. Who were those additional employees?

7 A. I have a conversation with Ali Hendrix.  
8 I had a conversation with -- excuse me -- the  
9 name...

10 With Mark Molaro. 03:22:34

11 And that's, I think, the extent of the  
12 additional conversations, meetings I've had.

13 And then I had some additional  
14 conversations over email with Steven Elia.

15 Q. And what were your conversations with 03:23:01  
16 Ms. Hendrix about?

17 A. We were discussing her work on platform  
18 policy enforcement.

19 Q. And you believe that that related in some  
20 way to friend sharing or whitelisting of friend 03:23:27  
21 sharing on APIs?

22 A. My understanding is it -- it related  
23 to -- some of the topics I've been designated for,  
24 yes.

25 Q. Including those two topics? 03:23:42

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1 A. I think so, yes. 03:23:46

2 Q. And what about Mark Molaro? Who is Mark  
3 Molaro?

4 A. Mark Molaro is a data scientist, as I  
5 understand it, at Meta. 03:23:55

6 Q. And what did you speak with him about?

7 A. We discussed his team's work on  
8 Facebook's efforts to track API usage.

9 Q. And during what time frame were those  
10 updates? 03:24:14

11 A. His team's work is primarily from 20 --  
12 2019 onwards.

13 Q. And Steven Elia, what did you speak with  
14 him about?

15 A. We were discussing when the rest API was 03:24:30  
16 deprecated, I think, and some other whitelisting  
17 details.

18 Q. And you said "the rest API"? What --  
19 what is that API?

20 A. Sorry. The rest API is the API which was 03:24:55  
21 built before the Graph API and continued to exist  
22 for some time.

23 Q. And what were the other whitelisting  
24 details you discussed with Mr. Elia?

25 A. We discussed how the friend permissions 03:25:15

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1 were finally removed from the Facebook developer 03:25:22  
2 platform.

3 Q. And what did you learn from Mr. Elia  
4 about that?

5 A. From Steven, I learned that there was a 03:25:29  
6 change in, I think, 2018 to make the friend  
7 permissions known and usable by -- by any  
8 application.

9 Q. And did you talk to Mr. Elia about the  
10 other APIs that emit friend data that we discussed 03:25:50  
11 previously in your testimony?

12 A. I don't recall specifically what -- what  
13 I discussed with Steven, but we -- we discussed  
14 like previous whitelists and capabilities that  
15 existed around friend data. 03:26:13

16 Q. Okay. So did you figure out by talking  
17 to him whether these other APIs that emit friend  
18 data continue to operate, or have they deprecated  
19 as well?

20 A. Can you let me ask what you mean by 03:26:27  
21 "which APIs that continue to emit friend data"?

22 Q. Sure.

23 We talked about a series of APIs that --  
24 that we went through and you identified as also --  
25 having the ability to emit some -- some friend 03:26:43

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1 data. 03:26:46

2 Can you give a list of those APIs are, or  
3 that's -- what I just said is enough to refresh  
4 your recollection about that testimony.

5 The events and pages and groups, all 03:27:02  
6 those APIs.

7 MR. SCHWING: Object to form.

8 THE DEPONENT: Yeah, that's -- that's a  
9 pretty long list of APIs, and we didn't discuss  
10 the -- the full gamut of APIs and their deprecation 03:27:14  
11 timelines.

12 Q. (By Mr. Loeser) So do you know  
13 whether -- these other APIs -- and these are the  
14 ones that didn't have the word "friends" in them.  
15 But nonetheless, as you testified, they did emit 03:27:24  
16 some friend data.

17 Do you know if those are continuing to  
18 operate?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: Can we -- can we be 03:27:34  
21 specific about the APIs we're talking about here?  
22 Because I want to make sure I'm giving you, you  
23 know, an accurate answer.

24 Q. (By Mr. Loeser) Sure. Well, three of  
25 them are events APIs, pages APIs, groups API. I 03:27:43

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1 think there was taggable friends as well, inevitable 03:27:48

2 friends. We have -- and read stream.

3 A. So -- so relatively large list of APIs.

4 The exact deprecation and removal dates for each of

5 them would be different. And I don't have -- I 03:28:09

6 don't have that to hand.

7 Q. And you don't know offhand whether

8 those -- all or any of those APIs have been

9 deprecated as of today?

10 MR. SCHWING: Compound. 03:28:20

11 THE DEPONENT: Yeah, I mean -- there's,

12 again, lots of APIs there. I -- I do know that in

13 April 2018, the -- the -- the comments and likes

14 edge, as I understand it, was removed from -- from

15 several of those APIs, and the groups and events 03:28:41

16 APIs have since been modified so that they only

17 emit data of people who have authorized the

18 application.

19 Q. (By Mr. Loeser) Okay. And so this is

20 something that if you were to investigate or 03:28:56

21 Facebook were to investigate the details, Facebook

22 could provide an answer as to the extent to which

23 any of these APIs continued to emit friend data and

24 so on today, right?

25 MR. SCHWING: Object to form. 03:29:11

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1 THE DEPONENT: My understanding is that 03:29:14  
2 today, Facebook has the infrastructure to determine  
3 whether or not which APIs exist and which APIs are  
4 emitting user data and whether or not that user  
5 data is on behalf of the person calling the API. 03:29:31

6 Q. (By Mr. Loeser) Okay. Thank you.

7 And, Mr. Cross, did you add to your notes  
8 for your deposition testimony today?

9 A. I have a -- I have a few pages of  
10 handwritten notes that I took in to help me prepare 03:29:48  
11 and answer the questions that may come up today.

12 Q. Okay. And --

13 MR. LOESER: Counsel, could we have those  
14 notes sent over to us as soon as possible?

15 MR. SCHWING: Yeah. We can -- we can 03:30:01  
16 look into that in a break, if that would work for  
17 you.

18 MR. LOESER: Great. And the sooner we  
19 get them, the better. I mean, ideally we can just  
20 get this all wrapped up today and we don't have to 03:30:09  
21 come back and do that.

22 MR. SCHWING: I understand, yeah. At a  
23 break, we're happy to get those over. I obviously  
24 can't focus on it right this second, but we'll work  
25 on that. 03:30:22

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1 MR. LOESER: Okay. Thank you. 03:30:23

2 Q. (By Mr. Loeser) Mr. Cross, you were on  
3 the strategic partnership team at some point in  
4 your career at Facebook; is that right?

5 A. I was on the platform partnerships team, 03:30:33  
6 which is, I think, the name of the team, but the  
7 name of the team may have changed over time.

8 Q. Okay. According to your LinkedIn, from  
9 August 2013 to January 2014, it appears that you  
10 were on the -- something called the "strategic 03:30:49  
11 partner team."

12 Is that accurate or --

13 A. I don't recall the -- the formal name of  
14 the team, but I refer as the platform partnerships  
15 team. It may have been referred to the strategic 03:31:03  
16 partnerships team as well.

17 Q. Okay. And were you at one point a  
18 strategic partner manager?

19 A. I was a partner manager. I think -- I'm  
20 not confident whether or not the word "strategic" 03:31:16  
21 was in my official job title, but I worked on that  
22 team, yes.

23 Q. Sorry. I'm leaning off camera to look at  
24 your résumé.

25 According to your résumé, the title that 03:31:31

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1 you have is strategic product partnerships. 03:31:32

2 Is that -- does that sound accurate to  
3 you?

4 MR. SCHWING: Object to form.

5 Foundation. 03:31:42

6 THE DEPONENT: If you're asking what my  
7 official title job was -- as per my kind of  
8 contract at Facebook, I can't remember that --  
9 that. This seems to be what's on my LinkedIn.

10 I couldn't tell if that was like my 03:31:56  
11 official Facebook job title at the time.

12 Q. (By Mr. Loeser) Okay. But I assume it's  
13 your practice to accurately record your job titles  
14 on your LinkedIn?

15 A. Generally, yes. The -- as I say, the 03:32:07  
16 team was referred to sometimes as the strategic  
17 partnerships team or the platform partnerships  
18 team.

19 Q. So at the time -- and I'll just use the  
20 terminology in your LinkedIn, understanding your 03:32:20  
21 testimony that you just gave.

22 But at the time that you were on the --  
23 you were a strategic product manager, how many  
24 strategic partners were there at Facebook?

25 A. I don't think there's an official 03:32:40

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1 definition of "strategic partners" for the -- for 03:32:43  
2 the company. And I don't know how many partners  
3 that the partnership team that I worked on would  
4 have considered managed at the time.

5 Q. And so when you were a strategic partner 03:32:57  
6 manager, what did you believe "strategic partner"  
7 referred to?

8 A. So, again, in my personal capacity when I  
9 worked on that team, my understanding is my job was  
10 to work with companies and app developers that 03:33:12  
11 Facebook had decided to -- to work with or -- or  
12 partner with to build Facebook platform  
13 integrations.

14 Q. And so if you were to define "strategic  
15 partner," that's how would you define it? 03:33:27

16 MR. SCHWING: Objection.

17 THE DEPONENT: Again, in my personal --

18 Sorry. Say again, Austin.

19 MR. SCHWING: Just take what -- you're  
20 faster than I am, Mr. Cross. It's later in the day 03:33:36  
21 for you, so I need some coffee. Just give me a  
22 heartbeat to object.

23 Object to form.

24 THE DEPONENT: So, again, you know, in a  
25 personal capacity, my understanding is that I 03:33:48

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1 would -- by partner, I would have been working with 03:33:50  
2 company's that the Facebook had decided to work  
3 with more closely to build Facebook platform  
4 integrations of some -- some -- some nature.

5 Q. (By Mr. Loeser) So -- so all of the 03:34:04  
6 strategic partners were partners that had  
7 integrations with Facebook?

8 A. I -- I don't think I can answer that  
9 question. Like I -- I don't know what the --  
10 there's a formal definition of "strategic partner." 03:34:19  
11 It's possible that some had -- most of the ones I  
12 would have worked with would have had integrations  
13 with Facebook in some -- with the Facebook  
14 developer platform in some way.

15 Q. And what are some examples of the 03:34:31  
16 partners that you worked with?

17 A. So Spotify would be -- would be one  
18 example. And then others that I worked with in my  
19 team in this -- in this capacity would have been  
20 things like Mixcloud, SoundCloud, and Giza and -- 03:34:54  
21 and Guardian.

22 Q. And did you work with any strategic  
23 partners that -- in which Facebook did not have  
24 some form of integration?

25 MR. SCHWING: Object to form. 03:35:13

## HIGHLY CONFIDENTIAL

1 THE DEPONENT: So when I was a -- when I 03:35:15  
2 was a partner manager, typically I would have been  
3 working with entities that had an integration with  
4 the Facebook developer platform in some way.

5 Q. (By Mr. Loeser) And was there a -- is 03:35:27  
6 there a common understanding at Facebook how  
7 Facebook defines "strategic partner"?

8 A. I don't think there's a common  
9 understanding at Facebook for what the -- what the  
10 definition of the "strategic partner" is. I think 03:35:41  
11 different organizations might define their  
12 partnerships with entities in -- in different ways.  
13 I don't there's a -- a standard definition of -- of  
14 what "strategic partner" means.

15 Q. Is a common denominator of strategic 03:35:58  
16 partners partners that provide value to Facebook?

17 MR. SCHWING: Object to form.

18 THE DEPONENT: Again, I don't think  
19 there's a -- a standard definition of what a  
20 strategic partner is. It's a relatively loose 03:36:13  
21 definition of -- of entities that -- that the  
22 partnerships team would have worked with.

23 Q. (By Mr. Loeser) Are there any strategic  
24 partners that don't provide value to Facebook?

25 MR. SCHWING: Object to form. 03:36:29

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1 THE DEPONENT: Yeah, I don't think 03:36:31  
2 there's a definition of "strategic partner," so  
3 it's -- it's hard to answer that question.

4 Q. (By Mr. Loeser) Well, however you define  
5 it, are there any strategic partners that don't 03:36:38  
6 provide value at Facebook?

7 MR. SCHWING: Same objection.

8 THE DEPONENT: Typically as a -- as a  
9 partner manager, you'd be working with -- with --  
10 with these organizations to build or potentially 03:36:50  
11 build integrations that would be valuable to,  
12 ideally, the partner, to users, and to Facebook.

13 Q. (By Mr. Loeser) So -- what are -- what  
14 are the ways in which a -- a strategic partner  
15 could provide value to Facebook? 03:37:10

16 A. Again, I'm not sure that -- as I  
17 mentioned before, I'm not sure there's a definition  
18 of "strategic partner." So, again, can you ask  
19 that question in -- in a way that's like -- doesn't  
20 require me to rely on a definition which I -- I 03:37:28  
21 don't think is established.

22 Q. You use the term "strategic partner"  
23 sometimes in the course of your employment at  
24 Facebook, right?

25 A. I would have typically referred to 03:37:40



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1 "partners" and then sometimes "strategic partners." 03:37:41

2 So like -- I may have used those terms, yes.

3 Q. Okay. And so what was your understanding

4 of the term "strategic partner" if it's different

5 than what you already testified? 03:37:59

6 A. So my -- my understanding --

7 THE DEPONENT: Sorry. Say again, Austin.

8 MR. SCHWING: Asked and answered.

9 Go ahead.

10 THE DEPONENT: Yeah, so my understanding 03:38:06

11 of -- of -- of "strategic partner" would be an

12 entity, an organization that Facebook has partnered

13 with or was considering partnering with to build

14 some form of integration with the Facebook

15 developer platform. 03:38:21

16 Q. (By Mr. Loeser) And back to the

17 questions about value, so let's talk about

18 partnerships generally.

19 Partners -- Facebook partners with

20 developers that provide value to Facebook; is that 03:38:36

21 right?

22 A. Typically the partnerships team would be

23 focused on working with entities that provided

24 value to -- to users by building integrations with

25 the Facebook developer platform. 03:38:51

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1 Q. So you're saying that Facebook doesn't 03:38:53  
2 consider whether the partner provides value to  
3 Facebook other than the value to the users?

4 MR. SCHWING: Misstates testimony.

5 THE DEPONENT: Yeah, that's not what I -- 03:39:01  
6 what I said. Typically when I as working with  
7 partners, we were focused on the value that those  
8 integrations would provide to -- to user.

9 Q. (By Mr. Loeser) And did you not also  
10 consider the value those integrations would provide 03:39:11  
11 to Facebook?

12 A. One of the things that -- that would be  
13 looked at is how this would be used by users and  
14 would those integrations be considered valuable to  
15 users, and the value -- the -- how -- how well they 03:39:29  
16 would be used by users and the implications for  
17 that on the Facebook community.

18 Q. And, again, were there types of value  
19 that Facebook took into account that pertained to  
20 Facebook as opposed to users? Can you think of any 03:39:47  
21 ways that a partnership would provide value  
22 directly to Facebook other than the benefits  
23 received by the users?

24 MR. SCHWING: Vague. Compound.

25 THE DEPONENT: Yeah, so typically an 03:40:03

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1 integration would allow people, for example, to 03:40:04  
2 post stories back to Facebook, and that would  
3 provide content for newsfeed that could be seen  
4 by -- by their friends. That would be an example  
5 of the value that would be provided. 03:40:19

6 And -- and typically, if there's more  
7 content in newsfeed and there's more interesting  
8 stories for people to see, they might come back to  
9 Facebook more frequently and interact with those  
10 stories, and that might increase visitation. 03:40:31

11 Q. (By Mr. Loeser) Is ad revenue a value  
12 that Facebook received from some partners?

13 MR. SCHWING: Scope.

14 THE DEPONENT: Sorry. Yeah, my -- my --  
15 this is a -- there's a question about the 03:40:48  
16 advertising ecosystem, which is not my area of  
17 expertise. So, you know, that's very -- I'm not  
18 particularly well educated on -- to explain in  
19 detail.

20 What I can say from my personal 03:41:03  
21 experience, though, is that sometimes developers  
22 would want to buy ads to promote their  
23 applications, and that would be considered a form  
24 of -- of value.

25 Q. (By Mr. Loeser) Value for Facebook, 03:41:20

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1 right? 03:41:22

2 A. Well, if -- if a developer is buying ads  
3 to promote their application, it's because they  
4 believe that that's a -- that's a worthwhile thing  
5 to do in terms of growing -- growing an application 03:41:33  
6 and its user base, and in the process of doing  
7 that, Facebook would receive some money for the  
8 ads.

9 Q. And what about user data? Don't some  
10 developers provide Facebook with -- with user data 03:41:44  
11 that is a value to Facebook?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: So they typically --  
14 again, most integrations would allow developers --  
15 would allow users of those applications to share 03:42:01  
16 content back to Facebook, and that would create  
17 stories and newsfeed that could be seen by their  
18 friends or, in the case of Open Graph, which is on  
19 their timeline, which would enrich their Facebook  
20 profile. 03:42:20

21 Q. (By Mr. Loeser) And did the partnership  
22 group also look at potential opportunities for  
23 future relationships with -- with partners as a  
24 form of value for Facebook?

25 MR. SCHWING: Object to form. 03:42:33

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1 THE DEPONENT: Yeah, I'm not sure -- I'm 03:42:34  
2 not sure what -- what you mean by that. Like  
3 future value -- could you give me an example?  
4 Q. (By Mr. Loeser) Well, when you're --  
5 when the partnership group was interacting with a 03:42:42  
6 partner and was -- did the partnership group also  
7 consider whether there was some possibility for  
8 future relationships with that partner that could  
9 be a value to Facebook?  
10 A. I -- it's hard to know what -- what the 03:42:58  
11 partnerships team was considering in its -- in its  
12 various discussions with -- with developers and  
13 partner -- potential partners and potential  
14 partners in the past. So I'm not sure I can give  
15 an accurate answer to that question. 03:43:10  
16 Q. Do you know what an OEM is?  
17 A. My understanding that would mean  
18 "original equipment manufacturer."  
19 Q. Okay. And did -- did Facebook consider a  
20 value to Facebook an OEM preloading the Facebook 03:43:27  
21 app?  
22 A. So I think the partnerships team are  
23 the -- are the -- probably the determiners of what  
24 that -- of what that means. My understanding  
25 from -- from having worked in this area is that 03:43:45

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1       there was value to users by having the Facebook app       03:43:49  
2       on their device, and so it was easy and accessible  
3       without having to download it separately.

4               MR. LOESER: Let's go off the record.

5               THE VIDEOGRAPHER: Okay. We're off the       03:44:19  
6       record. It's 4:02 p.m.

7               (Recess taken.)

8               THE VIDEOGRAPHER: We're back on the  
9       record. It's 4:12 p.m.

10              Q.     (By Mr. Loeser) Mr. Cross, does Facebook       03:54:13  
11       enter into contracts with -- with some of its  
12       partners?

13              A.     Yes. There would be typically additional  
14       contracts that would have been agreed between  
15       Facebook and those parties to cover a number of       03:54:32  
16       different things.

17              Q.     And what types of partners does Facebook  
18       contract with?

19              A.     Well, you're asking who Facebook  
20       contracts with. Do you mean across the whole gamut       03:54:49  
21       of the company?

22              Q.     No. I mean with regard to the  
23       conversation we're having about the partnership  
24       group and the product managers, the conversation  
25       we're having now?       03:55:04

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1 MR. SCHWING: Outside the scope. Vague. 03:55:06

2 THE DEPONENT: Yeah, can you -- just,  
3 again, I'm trying to do my best here and, you know,  
4 give you an accurate answer.

5 So can you be a bit more specific 03:55:19  
6 about -- about the scope of the -- the work that  
7 you're -- you're referencing here?

8 Q. (By Mr. Loeser) Well, when you were in  
9 the partnership group, did you have partners that  
10 you worked with with which Facebook contracted? 03:55:28

11 A. So on a personal level, I don't -- I  
12 don't recall working with that many entities that  
13 had -- we had contract -- that the Facebook had  
14 contracts with when I was manager on the  
15 partnerships team. But -- but, yes, there were -- 03:55:49  
16 there were contracts that I was aware of between  
17 Facebook and some of these partners that covered  
18 their use of the Facebook developer platform.

19 Q. And -- and sometimes did Facebook contain  
20 in those contracts the ability to access APIs on 03:56:09  
21 the partners platform?

22 A. Yeah, it's -- that's possible, but I -- I  
23 don't recall any specific examples from my time on  
24 the partnerships team.

25 But, yeah, across the -- the history of 03:56:34

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1 the company, it's possible, but I'd be speculating 03:56:36  
2 exactly as to what.

3 Q. Okay. And in the context of the  
4 relationship with partners, what does "reciprocity"  
5 mean? 03:56:52

6 MR. SCHWING: Object to form. Scope.

7 THE DEPONENT: So, again, can you be a  
8 bit more specific about like the -- the -- the  
9 scope we're talking about here? Is it the Facebook  
10 developer platform or -- or partners in general? 03:56:59

11 Q. (By Mr. Loeser) I'm talking about  
12 partners with which Facebook contracts and where  
13 the contract governs the partner's access to the  
14 Facebook platform and Facebook's access to the  
15 partners platform. 03:57:14

16 In that context, is there something that  
17 Facebook refers to as "reciprocity"?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: I've heard the -- the  
20 phrase "reciprocity" used. I'm not sure if it's 03:57:25  
21 codified in any platform policies.

22 My personal understanding of -- of that  
23 term, it generally refers to really about fairness  
24 in sharing data with Facebook, users sharing  
25 stories back to Facebook where apps are also 03:57:48

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1 reading data from Facebook so as to contribute to 03:57:52  
2 the overall community Graph.

3 Q. (By Mr. Loeser) So when you say  
4 "fairness," you mean Facebook provides access to  
5 information and Facebook believes it's fair for 03:58:00  
6 them, the partner, to provide data back to  
7 Facebook?

8 MR. SCHWING: Vague.

9 THE DEPONENT: I think that's a -- that's  
10 a very broad statement. Let me -- best to give an 03:58:11  
11 example would be useful is if -- developers --  
12 let's take the Open Graph set of APIs that existed  
13 in around 2011, 2012. If apps were reading from  
14 the Open Graph, then it would be considered  
15 reasonable that they would be expected to offer 03:58:45  
16 users the ability to publish their actions in that  
17 app also back to the Graph so that everybody could  
18 benefit.

19 Q. (By Mr. Loeser) And so you keep talking  
20 about the benefits to users, and I'm wondering if 03:58:57  
21 Facebook also identified the benefit to Facebook  
22 specifically that results from reciprocity.

23 A. What -- Sorry.

24 MR. SCHWING: Object to form.

25 Go ahead. You can answer. 03:59:15

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1 THE DEPONENT: So, again, in the example 03:59:20  
2 of Open Graph stories in terms of reciprocity, then  
3 if users have the ability to share their activity  
4 in an app back with Facebook, then that enriches  
5 the Facebook newsfeed for their friends and creates 03:59:39  
6 additional content for their timeline that might  
7 encourage users to spend more time on Facebook.

8 Q. (By Mr. Loeser) And that's a benefit for  
9 Facebook?

10 A. Typically Facebook wants its user -- we 03:59:54  
11 want our users to find value in using our products,  
12 and spending more time on our products is one way  
13 that they may express that value.

14 Q. Facebook considers the value that a  
15 partner contributes to Facebook when making 04:00:11  
16 decisions about what user data to make available to  
17 that partner, right?

18 MR. SCHWING: Object. Vague.

19 Go ahead.

20 THE DEPONENT: Yeah, it's a very broad 04:00:26  
21 question that's hard to answer. Again, in general,  
22 when Facebook is considering partnering with --  
23 with an entity or working more closely with an  
24 entity, there would be an assessment of the -- the  
25 value that is trying to be created for users, how 04:00:48

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1 that would create value for Facebook, and for the 04:00:53  
2 third-party developer as well.

3 So typically working with these  
4 partnerships requires investments of time and  
5 energy from both sides and, you know, the -- the 04:01:07  
6 amount of resources to -- to do that are not  
7 unlimited, and so there would be some determination  
8 by the partnerships team as to whether or not this  
9 was a -- a partnership worth pursuing.

10 Q. (By Mr. Loeser) And Facebook considered 04:01:24  
11 a partner's value to Facebook when deciding whether  
12 to maintain access to certain data after the  
13 transition to platform 3.0, right?

14 A. Sorry. "Platform 3.0"? Can you be  
15 specific about -- about what you mean? 04:01:42

16 Q. Yeah, I'm sorry. I'm using -- there's a  
17 variety of terms used by Facebook, and "platform  
18 3.0" -- you tell me if I'm wrong -- is one of the  
19 references to the Graph API version 2.0 platform.

20 A. Well, that -- that terminology refers 04:01:57  
21 to -- is one of the code names used for this  
22 general series of work leading up to what became  
23 API version 2 and Login v4 that were launched in  
24 April of 2014.

25 And so could you ask the question again 04:02:14

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1 to make sure I understand. 04:02:20

2 Q. Sure. And with that understanding of  
3 what platform 3.0 means, Facebook considered a  
4 partner's value to Facebook when deciding whether  
5 to maintain access to certain data after the 04:02:31  
6 transition to platform 3.0?

7 A. Well, again, can you -- can you help me  
8 understand what you mean by "certain data"?  
9 Like -- like the specifics matter here, and I want  
10 to get -- make sure I give you an accurate answer. 04:02:47

11 Q. Yeah. There were series of APIs that  
12 were deprecated in the new platform; is that right?

13 A. In version 2 there were a number of APIs  
14 that were deprecated and a number of permissions  
15 that were publicly deprecated, yes. 04:03:01

16 Q. And when deciding whether to continue to  
17 allow partners to have access to those deprecated  
18 permissions, Facebook considered the value that  
19 those partners provided to Facebook, right?

20 MR. SCHWING: The question is vague. 04:03:15

21 THE DEPONENT: Yeah, I mean, it -- can we  
22 talk about which -- which specific partners you're  
23 referring to here and what kind of additional time  
24 periods and access we're talking about?

25 Q. (By Mr. Loeser) I would like you to 04:03:34

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1 answer the question. The question refers to the 04:03:35  
2 transition to the new platform, and it refers to  
3 deprecated permissions, and it refers to whether  
4 Facebook considered the value that partners  
5 provided to Facebook when deciding which of those 04:03:46  
6 partners to grant continued access to those  
7 deprecated functions.

8 So if you could answer the question  
9 whether Facebook took into account the value  
10 partners provided to Facebook when making that 04:03:58  
11 decision, that's all I'm asking.

12 MR. SCHWING: The question is vague.

13 THE DEPONENT: Yeah, so Facebook --  
14 sorry. Master Garrie, I see you here. I -- you  
15 said earlier that means because you want to 04:04:13  
16 intervene and help.

17 I want to give a good answer to -- to  
18 this question, and --

19 SPECIAL MASTER GARRIE: I was going to  
20 just direct you to answer the question the best you 04:04:21  
21 can. So either a "yes," "no," or "I don't  
22 understand the question."

23 MR. SCHWING: Special Master Garrie,  
24 since you're on and we're -- I don't want to  
25 interrupt the questioning here too much, but I do 04:04:32

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1 have a concern that Mr. Loeser is supposed to be 04:04:35  
2 asking questions about topics 6 and 7, which relate  
3 to friend sharing.

4 SPECIAL MASTER GARRIE: Again, so  
5 let's -- 04:04:44

6 MR. SCHWING: And Mr. Melamed is going to  
7 be asking questions about the other topics.

8 I want to ensure that there are not  
9 multiple lawyers who are asking kind of overlapping  
10 questions here today, because I don't believe 04:04:53  
11 that's appropriate under our protocol. So I just  
12 want to make sure we're focused on actual 6 and 7  
13 here before we transition over to Mr. Melamed.

14 SPECIAL MASTER GARRIE: Okay. So one  
15 second. We will address that in a second. 04:05:03

16 But, Mr. Cross, what I was going to  
17 instruct you is so when you're asked a question,  
18 you can answer, "yes," "no," give an explanation or  
19 say "I don't understand the question," but  
20 otherwise, good question/bad question is not a 04:05:18

21 judgment. He's asked the question. You're to do  
22 your best and endeavor your best to answer the  
23 question. And you can say, yes, this is how I  
24 define this; no, this is how I define that, or so  
25 on and so forth and answer the question the best 04:05:32

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1 you can. 04:05:34

2 If you don't understand the question, you

3 can state "I don't understand the question as

4 asked" or something to that effect. Whatever

5 reflects your current state of mind as you 04:05:40

6 understand it. But you do just need to answer the

7 question the best you can.

8 THE DEPONENT: Cool. Thank you,

9 Special Master Garrie.

10 SPECIAL MASTER GARRIE: With that 04:05:51

11 settled, I'll turn it back to Counsel Loeser. Just

12 reask the question.

13 Once he finishes this line of

14 questioning, Counsel Schwing, we will go off the

15 record and address the other question. I just 04:05:58

16 don't want to interrupt Counsel Loeser's flow. I

17 just wanted to weigh in and just communicate to the

18 witness to answer the question the best you can as

19 a 30(b)(6) corporate representative.

20 And then we will -- once the line of 04:06:13

21 questioning is done, Counsel Schwing, we will

22 address your question or your point of concern.

23 Okay?

24 MR. SCHWING: Thank you, Special Master.

25 SPECIAL MASTER GARRIE: Of course. 04:06:23

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1 MR. LOESER: Thank you. 04:06:25

2 Q. (By Mr. Loeser) Mr. Cross, Facebook  
3 considered a partner's value to Facebook in  
4 deciding whether to maintain the partner's access  
5 to deprecated permissions after the transition to 04:06:30  
6 platform 3.0, right?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: So in -- in the  
9 transition, there were a number of integrations  
10 that -- that preexisted that transition, and 04:06:45  
11 Facebook would have determined that they would  
12 continue to exist based on the value to users and  
13 the value that they provided to -- to Facebook and  
14 the partner too.

15 MR. LOESER: Okay. 04:07:06

16 I guess we're going off the record.

17 We can go off the record.

18 THE VIDEOGRAPHER: Okay. Thank you.

19 We're off the record. It's 4:25 p.m.

20 (Recess taken.) 04:09:47

21 THE VIDEOGRAPHER: We're back on the  
22 record. It's 4:29 p.m.

23 Q. (By Mr. Loeser) Mr. Cross, when deciding  
24 whether to provide access to the friend data after  
25 2014 for partners, did Facebook consider the value 04:11:41

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1 that the partners could provide to Facebook? 04:11:46

2 MR. SCHWING: The question is vague.

3 THE DEPONENT: Yeah, I -- again, I -- I

4 hope -- I just want to make sure I answer this

5 correctly. A whole bunch of things were considered 04:11:59

6 or would have been considered in determining

7 whether or not to -- to allow integration partners

8 to continue to have access to information after the

9 APIs and permissions were more publicly deprecated.

10 There's a whole -- a whole raft of things that 04:12:20

11 would have been -- would have been considered in

12 those determinations: the value to users, how

13 often they were being used, the contractual

14 determinations, if -- if there were any such,

15 and -- and so on. 04:12:39

16 So a wide range of things would have been

17 considered.

18 When you say "value to Facebook," can you

19 help me define what -- what you mean?

20 Q. (By Mr. Loeser) Well, that's what I've 04:12:50

21 been trying to have you testify about, all the ways

22 Facebook understands value.

23 So if you have some understanding of how

24 Facebook defines value that helps you answer that

25 question, go ahead and say what those things are 04:13:02

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1 and then answer the question. 04:13:04

2 A. So, yeah. One of the things that would  
3 have been considered is how often those apps are  
4 being used. So, for example, a device integration  
5 would have a number of people -- would be -- a 04:13:19  
6 number of people would be using it and -- and that  
7 would be considered in -- in the overall assessment  
8 of whether or not the information -- should  
9 continue -- the integration should continue.

10 So there's a -- a wide range of things 04:13:32  
11 that would have been considered, including user  
12 value and various types of value to Facebook.

13 Q. And revenue received by Facebook from  
14 the -- the partner was one of the other things, one  
15 of the other forms of value that Facebook 04:13:46  
16 considered, right?

17 MR. SCHWING: The question is vague.

18 THE DEPONENT: In terms of -- like, I  
19 recall seeing documents which -- which suggest that  
20 the revenue from a company was pulled and, 04:14:00  
21 you know -- assessed in some way. But I -- I do  
22 not recall when, you know, revenue from a partner  
23 was part of the assessment for -- for why  
24 integration would continue.

25 Q. (By Mr. Loeser) And so as Facebook's 04:14:32

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1 corporate designee here, can you testify as to 04:14:36  
2 whether revenue from the partner was considered  
3 when deciding whether to continue allowing a  
4 partner to have access to APIs that emit friend  
5 data? 04:14:48

6 A. Again, I can see --  
7 MR. SCHWING: Sorry.  
8 The question is vague.  
9 Go ahead.

10 THE DEPONENT: Yeah, I -- I recall seeing 04:14:53  
11 documents that were -- where revenue from a partner  
12 is considered as part of the overall assessment,  
13 but I -- I cannot say whether or not revenue was a  
14 determinant in whether or not a partner continued  
15 to have access or not. 04:15:12

16 Q. (By Mr. Loeser) And is there somebody  
17 else --

18 I'm sorry. I thought were finished.

19 A. Sorry -- continued to have access to  
20 publicly deprecated APIs or private APIs. 04:15:25

21 Q. And who at Facebook would definitively  
22 know the answer to that question?

23 MR. SCHWING: The question is vague.

24 THE DEPONENT: I -- I think like the --  
25 the -- I don't think anyone at Facebook would -- 04:15:40

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1 would be able to know whether or not for every 04:15:43  
2 single app, what the decision-making criteria was.  
3 So I'm not sure that's -- that's like fully --  
4 fully knowable.

5 I -- I don't recall -- and again, on a 04:15:58  
6 personal level, I do not recall being in any  
7 conversations where revenue was a determining  
8 factor in -- whether or not an app was continued --  
9 had an app continued to have access to deprecated  
10 permissions. 04:16:15

11 Q. (By Mr. Loeser) Okay. And I didn't ask  
12 you for a person who would know with regard to each  
13 and every partner. I'm just asking you as a  
14 general matter who would be the most knowledgeable  
15 person on Facebook who can answer the question 04:16:23  
16 about the extent to which revenue was taken into  
17 account when deciding to, for example, whitelist  
18 entities so that they could continue to obtain  
19 friend data?

20 A. I think the partnerships leadership team. 04:16:37  
21 The partnership team is probably the people who  
22 have the -- the -- the closest understanding of --  
23 of that. I've spoken to -- to several of those in  
24 preparation for this, and none of them represented  
25 to me that -- that revenue was -- was a driver in 04:16:56

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1 the decision-making. 04:17:00

2 Q. And who did you speak to about that?

3 A. I spoke to Ime Archibong, I spoke to  
4 Eddie O'Neil, and I spoke to Francisco Varela.

5 (Exhibit 401 was marked for 04:17:15  
6 identification by the court reporter and is  
7 attached hereto.)

8 MR. LOESER: Okay. We're going to  
9 introduce an exhibit, which is -- this is -- it'll  
10 come up in a second, Mr. Cross. This is an email 04:17:31  
11 from you to Jackie Chang and Brian Hurren dated  
12 October 30th, 2013, cc to Ime Archibong. Subject  
13 line on the email is "PS12n divide and conquer."

14 Do you see this email, Mr. Cross?

15 THE DEPONENT: I do. 04:17:54

16 Q. (By Mr. Loeser) This is an email that  
17 you offered; is that right?

18 MR. SCHWING: I'm sorry, Derek. Just  
19 really quickly so we can be on the same page and I  
20 can quickly get to documents too. 04:17:59

21 Was that -- was there like a tab number  
22 associated with that with the documents that you  
23 sent over? I'm wondering if -- I would just like  
24 to be able to -- rather than have you launch into  
25 it, have some access to look at the document, so -- 04:18:12

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1 MR. LOESER: It will be Exhibit 401. 04:18:15

2 Q. (By Mr. Loeser) Do you see the exhibit

3 numbers in the Exhibit Share?

4 MR. LOESER: Or, Mr. Schwing, you can

5 also just look at the Bates number and match it to 04:18:38

6 what you receive.

7 MR. SCHWING: Okay. Go ahead. I got it.

8 I just had a little technical difficulty there, but

9 go ahead. Thank you.

10 Q. (By Mr. Loeser) Mr. Cross, do you see 04:18:51

11 the email?

12 A. I do see the email.

13 Q. And the date is October 30th, 2013,

14 right?

15 A. Yup. 04:19:00

16 Q. And the email has an attachment. It says

17 "PS12n private platform Ops & Partnership Work

18 Streams.key"; is that right?

19 A. That's right.

20 Q. And that's an attachment that you 04:19:11

21 prepared, correct?

22 A. I -- that's likely.

23 Q. And one of the recipients is Brian

24 Hurren. Who is Brian Hurren?

25 A. Brian Hurren was a partner manager on the 04:19:24

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1 platform partnerships team. 04:19:27

2 MR. LOESER: And we can go to the next  
3 exhibit, which is the attached slide deck.

4 (Exhibit 402 was marked for  
5 identification by the court reporter and is 04:19:36  
6 attached hereto.)

7 Q. (By Mr. Loeser) And while we're waiting  
8 for that, Mr. Cross, what was your job at Facebook  
9 in October 2013?

10 A. I was a partner manager on the platform 04:19:59  
11 partnerships team.

12 Q. And how many partner managers were there  
13 at the time?

14 A. On the platform partnerships team or at  
15 the company? 04:20:11

16 Q. On the platform partnerships team.

17 A. I'm not sure of the exact number, but it  
18 was less than -- less than ten.

19 Q. And we're looking now at Exhibit 402,  
20 which is the slide deck that you prepared with the 04:20:26  
21 title "PS12n: Partnerships & Operations, Managing  
22 the Private Platform."

23 Do you see that?

24 A. I see.

25 Q. So that the record is clear, what is 04:20:39

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1 PS12n? 04:20:41

2 A. PS12n refers to platform simplification,  
3 which is another code name for the set of proposed  
4 changes that ultimately resulted in the launch of  
5 Graph API v2 in April 2014. 04:20:54

6 Q. And how is it that you came to prepare  
7 this PowerPoint?

8 A. I don't recall exactly what -- how I came  
9 to prepare this -- this PowerPoint. But at the  
10 time, my understanding is that there were a set of 04:21:13  
11 changes being proposed to the Facebook developer  
12 platform, and the partnerships team were trying to  
13 understand what the impact would mean for  
14 Facebook's -- the -- the developers that the  
15 partnership team worked with. 04:21:37

16 Q. And why is it that you were tasked with  
17 preparing this PowerPoint?

18 Do you recall?

19 A. I don't recall why I was -- why I was  
20 tasked with it, but -- but at time I recall our -- 04:21:46  
21 our -- most of the team was engaged in some way  
22 and -- in trying to understand the impact on the  
23 developer ecosystem and the -- the partners that  
24 were managed by the team.

25 Q. And what is Facebook's private platform? 04:22:00

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1           A.    So, again, I -- I think the -- well -- I           04:22:09  
2    think the best way to answer that is my experience  
3    in a personal capacity.  What I'm referring to here  
4    is the set of APIs, permissions, and so on that  
5    were not available to regular developers and were           04:22:23  
6    available to developers through whitelists.

7           Q.    Okay.  You can go to slide 2.

8                   Are you looking at -- I'll just represent  
9    to you this is the second slide.  There's no page  
10   numbers on them.  But the title of the slide is           04:22:47  
11   "PS12n:  Partnerships/Operations Goals."

12                  Do you see that?

13           A.    I do.

14           Q.    Could you read each of the bullet points,  
15   and after each one, explain what it means.           04:22:56

16           A.    I'll -- I'll do my best.  This is a slide  
17   deck written kind of nearly -- nearly eight years  
18   ago now.  And so I'll do my best, given the time  
19   that's elapsed since.

20                  The first bullet is "Protect the Graph,"       04:23:18  
21   which my understanding is around ensuring that  
22   Facebook's information or the -- the user's  
23   information is being appropriately used by  
24   applications in -- by apps and developers.

25                  The next bullet is "but retain           04:23:36

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1 valid/strategic use cases." 04:23:41

2 Q. Actually, let me pause you for a second.

3 On "Protect the Graph," you mentioned it  
4 was to make sure that users' data was used  
5 appropriately. 04:23:50

6 Was it also to make sure that Facebook  
7 wasn't providing access to user data without  
8 getting anything in return from its partners?

9 A. Sorry. I may have to think about that to  
10 make sure I give you a correct answer. 04:24:10

11 I don't think this was -- I don't think  
12 this refers to -- to reciprocity. It's that -- my  
13 understanding, again, given that this slide deck  
14 is, you know, is eight years old, and going off  
15 what I can read on the page, my recollection is 04:24:29  
16 that this is about making sure that the -- the  
17 information that is emitted to third parties is  
18 being used appropriately and creating value for  
19 users.

20 Q. And what is the basis for your 04:24:44  
21 understanding of that point?

22 A. The basis for my understanding is my  
23 memory from eight years ago, so that's what I'm  
24 going off here.

25 Q. Okay. So the next bullet, could you read 04:24:59

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1 that one again, please. 04:25:01

2 A. The next bullet is "but retain  
3 valid/strategic use cases."

4 Q. So what did Facebook mean here when it  
5 wrote that one of the goals was to retain valid 04:25:11  
6 strategic use cases?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: Again, this -- this is a  
9 document written by a person, in this case, me. So  
10 I don't think that is necessarily Facebook's as a 04:25:24  
11 company's understanding. This is one document  
12 written -- written a long time ago by -- by a  
13 person.

14 I can talk about what -- what I recall  
15 meaning or what I think this means, given my -- my 04:25:38  
16 personal involvement, which is that there were  
17 integrations, for example, that were valuable to --  
18 to users that wouldn't be possible under the  
19 proposed changes, and -- and those -- those  
20 would -- there was a consideration that those -- 04:25:59  
21 those should continue, a good example being the  
22 Facebook app on BlackBerry. That would be, I  
23 think, an app that was considered valuable to  
24 users, valuable to BlackBerry, and valuable to  
25 Facebook. 04:26:17

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1 Q. (By Mr. Loeser) Okay. And skipping down 04:26:18  
2 to the last bullet points "Dev NPS-neutral  
3 (short-term), Dev NPS-positive (medium term)."

4 What -- what does that mean?

5 A. So Dev NPS-neutral. So NPS means -- or 04:26:37  
6 Dev NPS means developer net promoter score, which  
7 at the time was a metric used to survey Facebook's  
8 platform developers and understand their level of  
9 satisfaction with the Facebook developer platform.

10 And so what this means is that the -- a great 04:27:00  
11 outcome for those changes in the short term would  
12 be no impact on developer NPS and that over time  
13 these changes would be positive for developer NPS.

14 Q. And the title of this slide shows that  
15 these bullets relate to the partnership operation 04:27:18  
16 goals; is that right?

17 A. The slide says "partnerships/operations  
18 goals."

19 Q. And were these, in fact, Facebook's goals  
20 at the time? 04:27:29

21 A. Again, I don't think it's fair to  
22 represent these as Facebook's goals. This is a  
23 skeletal draft slide deck written by one person  
24 in -- in kind of mid-2013, so I don't think this  
25 was -- this is officially Facebook's goals. 04:27:49

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1                   So no, I don't think it's right to make                   04:27:52

2                   that representation.

3                   Q.     Well, were these the goals that were --

4                   that were implemented and that Facebook sought to

5                   achieve through the transition to the new platform?                   04:28:01

6                   MR. SCHWING:   Object to form.

7                   THE DEPONENT:   Again, no, I don't

8                   think -- I don't think it's right to say that these

9                   are Facebook's goals.   These are the goals that I,

10                  as the author of this document, was proposing or                   04:28:12

11                  asserting that would be attempted, but I don't

12                  think that's right to say that these are Facebook's

13                  goals for the overall program.

14                  Q.     (By Mr. Loeser)   Well, you were there

15                  through the whole process -- right? -- the                   04:28:28

16                  transition?

17                  A.     I was there through -- I was working on

18                  this from -- from mid-2013 to kind of mid-2015.

19                  Q.     Okay.   So through the transition, right?

20                  A.     Yeah, through -- through most of the                   04:28:43

21                  transition, yes.

22                  Q.     Okay.   So were these the goals you had in

23                  mind for that transition and that Facebook

24                  implemented?

25                  MR. SCHWING:   That's compound.                   04:28:53

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1 THE DEPONENT: So, again, I don't -- I 04:28:54  
2 don't think it's -- I mean, there are a number of  
3 goals that Facebook has -- was attempting to --  
4 attempting to achieve with this transition. These  
5 four bullets suggest a proposed subset as -- as I, 04:29:07  
6 as a person on the partnerships team, understood  
7 them in -- in kind of mid to late 2013.

8 So I don't -- I don't think it's right to  
9 say that these are -- these are the goals of the  
10 overall program. 04:29:21

11 Q. (By Mr. Loeser) Were any of these goals  
12 abandoned through the transition?

13 A. I don't think [REDACTED] was a  
14 particular focus of the -- of the -- of the effort.  
15 I wouldn't say it was abandoned. It was -- it was 04:29:38  
16 considered, but I don't think that was necessarily  
17 the primary goal of the set of transitions.

18 Q. Okay. We can go to the next slide.

19 You see that the title of this slide is  
20 "PS12n Ops/Partnerships Workstreams"? 04:29:56

21 Do you see that?

22 A. I do.

23 Q. And so you helped come up with the  
24 workstreams that would be necessary to implement  
25 the transition to the new version of social Graph? 04:30:12

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1 were a set of APIs, permissions, and modifications 04:31:33  
2 to that public platform that were available or --  
3 or -- or enacted through a set of whitelists, and  
4 that's what I'm referring to by -- by the phrase  
5 "private platform." 04:31:51

6 There were not distinct like things. One  
7 was really a modifier of the other.

8 Q. So if you go to the far left, the first  
9 box, it says "public," and then in the box Login,  
10 Open Graph, Dialog, Payments, Canvas, non-app 04:32:07  
11 friends -- I missed one, plug-ins -- friend data,  
12 newsfeed, et cetera.

13 Do you see that?

14 A. I do see that.

15 Q. And what are each of those things? 04:32:18

16 A. I -- I'll do my best to enumerate.

17 Q. I'm sorry. Just generally, are those  
18 permissions? APIs? Descriptions of APIs? What --  
19 what are they generally?

20 A. It refers to, actually, a pretty wide 04:32:35  
21 gamut of different things. Login is the Facebook  
22 login dialogue. Open Graph is the ability for  
23 developers to read and write structured actions  
24 to -- to Facebook. Dialogs is a suite of -- a set  
25 of dialogs, user -- user-facing dialogs for a range 04:32:53

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1 of purposes like sharing. Payments refers to the 04:32:59  
2 ability of developers to -- to take payments from  
3 users inside apps. Canvas refers to the ability to  
4 render an app inside Facebook on dub-dub-dub.

5 Plug-ins refers to the ability to embed various 04:33:11  
6 social plug-ins, of which were there several, on  
7 your website. Non-app friends refers to things  
8 like the full friend list. Friend data is  
9 referring -- again, my personal recollection --  
10 referring to the friend permissions. And then 04:33:25  
11 newsfeed referring to the -- to the newsfeed API  
12 and so on.

13 So it's actually quite a wide range of  
14 things that -- that -- that I was reflecting there  
15 as part of the, quote, public platform. 04:33:37

16 Q. And so just help me if I understand this  
17 slide correctly. All the things you just listed  
18 were available on the public platform at the time  
19 that you created this slide; is that right?

20 A. My understanding is that at the time I 04:33:51  
21 created this slide in kind of mid-2013, that was a  
22 list of things that would be reasonably considered  
23 to be part of the public developer platform, the  
24 standard Facebook public developer platform.

25 Q. And your arrow that says 1a, 1b directs 04:34:04

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1 all of those things down to the private platform in 04:34:09  
2 the list that says No. 2 there.

3 Do you see that?

4 A. I do see that.

5 Q. And so was the idea that all of those 04:34:17

6 abilities and -- and I don't want to use the wrong  
7 word, because there's a variety of different ways  
8 to describe those things -- but some are  
9 permissions, some are capabilities, some are tools.

10 All of those things will not be available publicly 04:34:30  
11 anymore but will instead be available privately; is  
12 that right?

13 MR. SCHWING: Object to form.

14 THE DEPONENT: Sorry again. Trying to  
15 explain this is -- 04:34:42

16 Yes, my understanding in -- again, on a  
17 personal level, writing this deck and remembering  
18 what I knew in -- in mid-2013, a lot changed  
19 between then and the launch of the ultimate set of  
20 changes. 04:34:56

21 Is the -- that yes, there were some  
22 things that were going to be -- my understanding at  
23 the time was that there was some subset of those  
24 things which would no longer be publicly available;  
25 i.e., available to -- to regular developers. 04:35:09

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1 Q. (By Mr. Loeser) Okay. And two of those 04:35:13  
2 things in particular here on this list are non-app  
3 friends and friend data, right? Those were being  
4 transitioned from being publicly available to being  
5 available on the private platform, right? 04:35:25

6 A. Again, my understanding at the time is  
7 that these things would be no longer publicly  
8 available to regular developers eventually but that  
9 there would be some use cases that would continue  
10 to -- to need them and that those would be made 04:35:44  
11 available via -- via certain whitelists.

12 Q. So with regard to non-app friends and  
13 friend data in particular, those -- let's talk  
14 about friend data first. Permissions relating to  
15 friend data weren't going eliminated altogether, 04:36:07  
16 right? Instead they were going to be made  
17 available on the private platform?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: So, again, my  
20 understanding writing this slide deck in -- in kind 04:36:18  
21 of mid to late 2013 is that these things were  
22 being -- were being deprecated from the -- the  
23 public surface area, and the -- I -- I was, again,  
24 as the author of this deck, trying to imagine a  
25 world where there would be some apps that would 04:36:36

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1 continue to have access to this information after 04:36:40  
2 it had been publicly deprecated.

3 Q. (By Mr. Loeser) And in -- this slide has  
4 the title "Workstreams," right?

5 A. This article contains the word 04:36:55  
6 "Workstreams," yeah.

7 Q. Okay. And so you're diagramming the  
8 workstreams here, and you have 1a, 1b, 2, 3, and 4?  
9 Those are the workstreams?

10 MR. SCHWING: Object to form. 04:37:07

11 THE DEPONENT: Well, I -- I'm not  
12 entirely sure what they're referring to. Like,  
13 yes, those probably refer to a set of  
14 proposed/potential workstreams.

15 But, again, this is -- this is a skeleton 04:37:20  
16 deck that -- that -- that's is missing a lot of --  
17 a lot of content and I don't think represents what  
18 ultimately was done.

19 Q. (By Mr. Loeser) So I know there's a lot  
20 of information on this deck, but is there anything 04:37:35  
21 in particular that you see that was not done?

22 A. Well, I don't think we had the  
23 workstreams that -- that this deck suggests might  
24 exist. I don't think any of that was -- was set  
25 up. 04:37:53

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1 And I think there's -- exactly how 04:37:54  
2 these -- exactly how the changes to the platform  
3 were enacted, I don't think this is necessarily  
4 representative of what ultimately happened.

5 Q. With regard to non-app friends and friend 04:38:08  
6 data, does this accurately reflect what happened?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: So it -- it's -- it's hard  
9 to say this accurately represents what happened,  
10 because, you know, there's so much nuance and 04:38:25  
11 detail.

12 But at a high level, there were, you  
13 know, apps that continued to have access to some  
14 friends data after the -- the public deprecation  
15 of -- of those permissions. 04:38:47

16 Q. (By Mr. Loeser) Okay. We can go to the  
17 next slide.

18 Do you see the title of this slide is  
19 "Workstream 1a-Simon"? Does that refer to you?

20 A. That would refer to me. But as I 04:39:02  
21 mentioned in -- in the previous -- when we  
22 reviewing the previous slide, I don't think this  
23 represents in any case what -- what happened.

24 Q. Well, let's go through and figure out  
25 what did and what didn't. 04:39:18



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1       that there were some integrations and partnerships       04:40:35  
2       that were considered valuable to -- to users and  
3       the developers and Facebook and that those  
4       integrations would be expected to continue or there  
5       was a -- there was the -- the thought that some of       04:40:51  
6       those integrations would continue after the changes  
7       to the public developer platform. And this is  
8       referring to an analysis to understand -- well, not  
9       an analysis -- a proposed workstream to understand  
10      how the API changes would affect those       04:41:11  
11      integrations.

12           Q. And the idea was that for certain  
13      strategic -- what you define as strategic use  
14      cases, they would be exempt from the deprecations  
15      and instead continue to have access to APIs or       04:41:28  
16      permissions that no longer were public?

17           A. Again, at the time here, a lot changed in  
18      terms of how the changes were implemented and  
19      exactly what was implemented, but there was a  
20      thought in the partnerships team -- it was thought       04:41:50  
21      in the partnerships team that there would be ways  
22      or cases where some of these integrations would  
23      continue to -- to be able to operate even through  
24      the public deprecations of those permissions and  
25      APIs.       04:42:10

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1 Q. And this goal that's described here, that 04:42:10  
2 is, in fact, what Facebook did, right?

3 A. I don't think that's representative --  
4 that's -- that's -- appropriate to characterize  
5 that as -- as what Facebook did. There were, as 04:42:24  
6 we've discussed, certainly some integrations -- for  
7 example, a device integrations that continued to --  
8 to operate after the changes to -- to the public  
9 surface area.

10 But like I don't think it's appropriate 04:42:38  
11 to say that all strategic use cases, however that's  
12 defined, were -- were exempt.

13 Q. Well, did Facebook exempt some strategic  
14 use cases from PS12n impact?

15 A. Well, again, like there's no formal 04:42:58  
16 definition of -- of "strategic" as -- as we've  
17 discussed. But there were apps and integrations  
18 who -- who -- where their functionality continued  
19 after the public deprecation of -- of certain  
20 permissions and APIs. 04:43:16

21 Q. Okay. Let's look at the method you  
22 describe here.

23 Do you see No. 1? I take it that's a  
24 yes?

25 A. Sorry. Do I see No. 1? Sorry, Derek. 04:43:28



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1 Say again. 04:43:30

2 Q. Do you see that there's a heading

3 "Method"?

4 A. Yes, I see that, yeah.

5 Q. Then under "Method," there's a series of 04:43:35

6 numbers, 1 through 8.

7 Do you see that?

8 A. I do, yeah.

9 Q. And the first one is "[REDACTED]"  
10 "[REDACTED]". 04:43:43

11 Do you see that?

12 A. I see that, yup.

13 Q. Did that happen?

14 A. There was some analysis -- I recall some

15 analysis being done to [REDACTED] 04:43:54

16 [REDACTED] yes.

17 Q. Okay. Do you see No. 2, "segment into

18 our four functional Groups: Games, Non-games,

19 Mobile, Marketers/PMD"? Do you see that?

20 A. I see that. 04:44:11

21 Q. That happened, right?

22 A. I don't recall if that happened as -- as

23 prescribed here. There was a number of different

24 categorizations that were -- were used across

25 different times. I -- I don't recall if those -- 04:44:22

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1 that categorization or taxonomy was ultimately 04:44:25  
2 used.

3 Q. Do you recall the slide deck we went  
4 through previously that categorized different apps  
5 in those -- those categories? 04:44:35

6 A. I remember reviewing a slide deck. Did  
7 they match to -- it's possible they matched to  
8 those categories, but I can't be 100 percent sure.

9 Q. Did you see No. 3, "each functional group  
10 to define their whitelisting criteria"? 04:44:48

11 Did that happen?

12 A. Again, speaking from my personal  
13 recollection, I don't recall whether or not that  
14 happened. I don't think that happened.

15 Q. Did anyone define any whitelisting 04:45:04  
16 criteria?

17 A. I don't think there was a formal written  
18 set of whitelisting criteria defined, no.

19 Q. So it was just ad hoc?

20 MR. SCHWING: Object to form. 04:45:19

21 THE DEPONENT: I wouldn't characterize it  
22 as ad hoc. The -- the decisions were made on -- on  
23 a case-by-case basis through conversation with --  
24 with the partnerships team primarily.

25 Q. (By Mr. Loeser) Okay. Did anyone come 04:45:34

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1 up with any type of principles that would be 04:45:35  
2 applied to deciding whether to whitelist?

3 A. I don't recall a formal set of principles  
4 or framework that was -- that was used. Ultimately  
5 the -- the set of integrations -- the -- were 04:45:48  
6 whitelisted was relatively small and was managed  
7 through -- on a case-by-case basis through the  
8 partnerships team.

9 Q. Take a look at No. 4, "assess apps for  
10 the new Capabilities against those criteria." 04:46:01

11 Did that happen?

12 A. Again, on -- on a personal level, I -- I  
13 think -- assess apps for the new capabilities. I  
14 mean, it's -- it's hard to answer whether or not  
15 that happened, but certainly some new capabilities 04:46:21  
16 were created and some apps were added to them in  
17 order to allow them to continue accessing  
18 information, accessing -- in order for their  
19 activity to continue.

20 So it's possible that meets that -- meets 04:46:40  
21 that criteria, but it's hard to say whether or not  
22 that -- that bullet was met as written.

23 Q. Okay. So No. 5 is "review  
24 recommendations with [REDACTED], Group  
25 Leads (e.g. [REDACTED])." 04:46:53

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1 Do you see that? 04:46:55

2 A. I see that.

3 Q. Were whitelisting decisions reviewed by  
4 those leads?

5 A. I don't think individual -- every 04:47:02  
6 whitelist decision was reviewed with -- with those  
7 folks. It would have been some conversations about  
8 generally how to proceed.

9 Q. Could partner managers just make a  
10 decision on their own to whitelist and that was 04:47:19  
11 that?

12 A. Again, like my -- I was not on the  
13 partnerships later on when the actual whitelisting  
14 decisions were -- were being discussed within the  
15 partnerships team, because the -- that didn't need 04:47:35  
16 to happen until kind of late 2014, early -- early  
17 2015.

18 So a partner manager certainly could  
19 propose that their -- that a given partner needed  
20 to be whitelisted, and then that would be a 04:47:58  
21 discussion between them and the product team.

22 Q. No. 6 is "physically add apps to  
23 capabilities."

24 That happened, right?

25 A. Well, were some new capabilities created, 04:48:15

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1 and apps were added to them later on in 2014 and 04:48:17  
2 '15.

3 Q. No. 7 is "at launch, outreach to apps to  
4 let them know they've been whitelisted."

5 That happened, right? 04:48:29

6 A. I don't recall whether or not that  
7 happened or what the -- what the communications  
8 were between the partnerships team and the -- and  
9 the various partners and app developers.

10 Q. And who at Facebook would know whether 04:48:41  
11 there was outreach to apps to let them know they'd  
12 been whitelisted?

13 A. I think the partnerships team would  
14 have -- the platform partnerships team would have  
15 handled some, the games partnerships team might 04:48:53  
16 have handled others, and the mobile partnerships  
17 team would have -- would have handled others,  
18 and -- and -- and the marketing or PMD would have  
19 handled others.

20 Q. And the last method on your list here is 04:49:07  
21 "get necessary contracts in place" -- that's No. 8  
22 -- (see Workstream 2)."

23 Did that happen?

24 A. Again, it's -- it's hard to know whether  
25 or not this -- you know, precisely what that means 04:49:22

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1 or what happened. This is, again, a slide deck 04:49:24  
2 that was written as -- as a draft and skeleton  
3 slide deck proposed in mid-2013, and ultimately  
4 the -- the changes were not enacted for -- for --  
5 for more than a year and a half later. 04:49:35

6 Some -- as part of this process, I do  
7 recall contracts that existed previously being  
8 checked to see whether or not there were, for  
9 example, [REDACTED]  
10 [REDACTED] in those contracts, to determine whether or 04:49:56  
11 not [REDACTED]  
12 [REDACTED]

13 Q. And you see the "Who?" heading at the  
14 bottom left on your slide?

15 A. I do. 04:50:16

16 Q. And do you see it has four -- the same  
17 four segments referred to above: "Games, Mobile,  
18 OEM carrier/OS, non-Games, marketers/PMDs"?

19 Do you see that?

20 A. I see that. 04:50:35

21 Q. Which of those are integration partners?

22 A. Integration partners cuts across Mobile  
23 and -- and Non-Games.

24 Q. Okay. So the marketers, PMDs, and Games  
25 are not considered integration partners? 04:50:50

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A. Well, they are -- they're entities with which Facebook has relationships which could be characterized as partnerships, and they are -- they integrate or develop against the Facebook developer platform.

6 I think it's important these -- these  
7 words and phrases were used relatively  
8 interchangeably, so like there is a -- a specific  
9 definition for -- for "integration partners" that  
10 covers some of the integrations and apps that were 04:51:20  
11 built or managed by the mobile partnerships team  
12 and the platform partnerships team, but the other  
13 categories, you know, could be at times  
14 characterized as integrations or partners.

15 Q. Well, let me try and understand. 04:51:40

16           The way that Facebook was using  
17       "integration partner" and the way you've used it --  
18       I just want make sure your testimony is clear.

19	There's four categories here. And does	
20	the phrase "integration partner," as Facebook has	04:51:54
21	used that phrase in this case, cover all four of	
22	those categories?	

23 MR. SCHWING: Objection. Object to form.

24 THE DEPONENT: It -- it doesn't -- the

25 phrase "integration partner" doesn't directly map 04:52:07

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1 to these four categories. 04:52:10

2 Q. (By Mr. Loeser) So, again, which of  
3 these four categories would fall outside of the  
4 concept of integration partners?

5 A. Again, my understanding is that -- of the 04:52:24  
6 integration partners that -- that I've -- that I've  
7 seen defined and referred to, some of them were  
8 mobile, integrations and OEMs, carriers and OS's.  
9 Others would be -- might be considered non-Games.

10 Q. Do you see the "Why?" heading in your 04:52:44  
11 slide here?

12 A. I see "Why" on the slide.

13 Q. And that is a "why" that's -- describes  
14 workstream 1a, "preapprove apps for new PS12n  
15 capabilities"; is that right? 04:53:05

16 A. Again, I think we're just making sure we  
17 characterize this slide appropriately for -- for  
18 the record. This is a proposed workstream that,  
19 you know, I don't think was ever enacted upon.

20 What's on the slide is a proposed workstream for -- 04:53:18  
21 with the title "Preapprove apps for PS12n  
22 capabilities," and there's the "why" bullets there.

23 But I -- I want to be clear that I don't  
24 think this represents a -- a formal workstream that  
25 was enacted upon, in my recollection. 04:53:36

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## HIGHLY CONFIDENTIAL

1 Q. Okay. So the goal "exempt strategic use 04:53:38  
2 cases from PS12n impact," right?

3 A. I see that on the slide, yes.

4 Q. Okay. And then the "why" is down below.

5 Could you -- could you read what is -- 04:53:51  
6 what is wrote under the "why."

7 A. What's under the "why" on the slide is  
8 "retain strategic uses cases" and "keep the right  
9 partners happy."

10 MR. LOESER: Mr. Cross, would this be a 04:54:08  
11 good time for a break, or you want to continue?

12 THE WITNESS: Yeah, now's a great time  
13 for a break.

14 MR. LOESER: Why don't we take a  
15 ten-minute break. 04:54:14

16 THE VIDEOGRAPHER: Okay. We're off the  
17 record. It's 5:12 p.m.

18 (Recess taken.)

19 THE VIDEOGRAPHER: We're back on the  
20 record. It's 5:25 p.m. 05:07:21

21 THE DEPONENT: I'm just going to shut the  
22 door to my office because my kids are about to  
23 arrive home so it'll get noisy. So my apologies.

24 MR. LOESER: No problem.

25 THE DEPONENT: Thank you. Sorry. 05:07:44

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1 Q. (By Mr. Loeser) Okay. We can go to the 05:07:45  
2 next page of this slide deck. I just have a few  
3 more questions.

4 Do you see the title of this slide,  
5 "Workstream 1b-Bryan"? 05:07:54

6 A. Yup, I see that title on the slide.

7 Q. Okay. And can you read the -- what it  
8 says under the -- the header.

9 A. It says "set up a channel and process for  
10 impacted apps to apply for whitelists." 05:08:10

11 Q. And the Bryan up here, is that  
12 Bryan Hurren?

13 A. That would refer to Bryan Hurren, yes.

14 Q. Okay. And your idea was this workstream  
15 would be assigned to him? 05:08:24

16 A. Again, this is a potential proposed  
17 proper workstream in a draft slide deck without a  
18 huge amount of detail around it, but yes, as the  
19 author of this deck, I was imaging such a  
20 workstream could exist, and if it did, then Bryan 05:08:40  
21 might be the one to lead it.

22 Q. And was -- did Facebook set up a channel  
23 and a process for impacted apps to apply to  
24 whitelists?

25 A. I don't recall Facebook setting up a 05:08:54

## HIGHLY CONFIDENTIAL

1 channel or process for impacted apps to apply for 05:08:57  
2 whitelists.

3 Q. Do you know if that happened or not?

4 A. I don't -- I don't know if -- I don't  
5 recall a channel or process being -- being stood 05:09:09  
6 up. That suggests something public or formal  
7 that -- that I don't think happened.

8 So -- so no, in my estimation, no, a  
9 channel and process for impacted apps to apply for  
10 whitelists was not set up. 05:09:26

11 Q. Okay. We can go to the next slide.

12 Do you see the header on this slide is  
13 "Workstream 2-Jackie"?

14 Do you see that?

15 A. Yeah, I see that. 05:09:45

16 Q. And is that Jackie Chang?

17 A. That would refer to Jackie Chang, yes.

18 Q. And could you read what it says below the  
19 header.

20 It says "Design post-PS12n whitelisting 05:09:55  
21 process and requirements."

22 And did that happen?

23 A. No, I don't think that -- that happened  
24 as expected. Today Facebook has a process for  
25 handling whitelisting, so if we're talking up to 05:10:18

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1 today, then yes, such a process could be said to 05:10:20  
2 exist.

3 But in the 2013, '14, '15 time frame, I  
4 -- I don't think it's right to say a PS12n  
5 whitelisting process was set up. 05:10:32

6 Q. And you goal you provided here, could you  
7 read the goal.

8 A. The goal in the slide is "exempt  
9 strategic use cases we didn't catch in 1a," but  
10 I'll note that it's identical to what's on the -- 05:10:43  
11 the previous slide, which is indicative of this  
12 building a skeleton slide deck rather than one  
13 that's formally reviewed or published.

14 Q. And 1a refers to -- refers to what?

15 A. Again, going back to my recollection 05:11:05  
16 of -- of this deck, 1a would refer to what's shown  
17 here as a proposed workstream 1a.

18 Q. Which was to preapprove apps for new  
19 PS12n capabilities, right?

20 A. That's what the slide says for that 05:11:26  
21 proposed workstream, yes.

22 Q. And were there strategic use cases that  
23 were not caught in the preapproval process?

24 A. Again, I'm -- I'm not sure it could be  
25 said that a pre -- pre -- a preapproval process 05:11:41

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1 was -- was -- was set up. 05:11:45

2 So like -- it's hard to say that -- that  
3 that's -- that's what happened. So yeah, hard to  
4 say that happened.

5 Q. Do you see the "Why?" on -- on this 05:12:02  
6 slide?

7 A. Yeah, the "Why" on this slide, yes.

8 Q. Okay. Could you read the "Why."

9 A. It says [REDACTED] from granting access  
10 to [REDACTED]. 05:12:17

11 And the second line is "capture  
12 [REDACTED] in the  
13 future" -- "in the future."

14 Q. And starting with the first line, "[REDACTED]  
15 [REDACTED] from [REDACTED] 05:12:31  
16 [REDACTED] what was the risk you were -- had in  
17 mind here?

18 A. So, again, answering this in a -- in a  
19 personal capacity as the author of this deck and  
20 trying to remember what was in my head eight years 05:12:44  
21 ago, I'll do my best.

22 There's a number of private APIs and  
23 whitelists which were made available to -- to apps,  
24 and I -- I'm interpreting here the company would  
25 want to make sure that that -- those -- those APIs 05:13:08

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1 and permissions were being used appropriately. 05:13:12

2 Q. And what did you mean by "used  
3 appropriately"?

4 A. So that can mean a range of things,  
5 depending on -- on the API, depending on the 05:13:26

6 permission, depending on the whitelist. For  
7 example, there were APIs -- like one example might  
8 be off.login, which was made available to external  
9 developers under a whitelist. And the way that  
10 that was implemented by the developer was important 05:13:52

11 to be done correctly, and you would want to ensure  
12 that people who had that capability would be  
13 implementing it correctly and that -- that  
14 implementation would remain correct over time.

15 Q. So one data was -- one of the types of 05:14:19  
16 sensitive data that Facebook removed from the  
17 public platform and made available to certain apps  
18 and partners on the private platform, right?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: So there were a range of 05:14:39  
21 permissions and APIs that were previously available  
22 to any developer that became only available to  
23 whitelisted developers after API v2 launch.

24 Q. (By Mr. Loeser) I appreciate that, but  
25 that's not the question I asked, so I'll -- I'll 05:14:57

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1 read you the question again, and if you could just 05:14:59  
2 try to answer the question.

3 A. My apologies.

4 MR. SCHWING: Argumentative.

5 Q. (By Mr. Loeser) So I'll read it again. 05:15:07

6 "Friend data was one of the types of  
7 sensitive data that Facebook removed from the  
8 public platform and made available to certain apps  
9 and partners on the private platform."

10 MR. SCHWING: Object to form. 05:15:18

11 THE DEPONENT: So, again, the -- the --  
12 one -- some of the information that was made  
13 available via private APIs was access to the friend  
14 permissions and the newsfeed APIs. I -- so those  
15 were made available via the private API surface 05:15:36  
16 area.

17 Q. (By Mr. Loeser) And when Facebook did  
18 that, which it did for strategic use cases, these  
19 apps and partners were granted access to sensitive  
20 data and features, right? 05:15:48

21 MR. SCHWING: Object to form.

22 THE DEPONENT: I think the definition  
23 of -- of "sensitive" is somewhat subjective. And  
24 there's a range -- what we're talking about here is  
25 a set of private capabilities, APIs and platforms 05:16:02

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1 that go way beyond just friend data. There's all 05:16:05  
2 kinds of APIs and -- and things that were -- that  
3 are being referred to here.

4 So like I think there's a wide range of  
5 things that were considered as this part of the 05:16:22  
6 slide.

7 Q. (By Mr. Loeser) Okay. I'm asking  
8 specifically about friend data. So can you answer  
9 the question specifically with regard to friend  
10 data? 05:16:32

11 MR. SCHWING: Vague.

12 THE DEPONENT: So, yeah, I'm -- I'm  
13 trying to do my best and answer the -- answer the  
14 question as best I can, right.

15 Q. (By Mr. Loeser) Let me ask you a 05:16:45  
16 different question, then, and see if we can't get  
17 to the bottom of this.

18 When you said [REDACTED] from  
19 granting access to [REDACTED], "  
20 did you have in mind that granting access to friend 05:16:53  
21 data was [REDACTED]

22 A. Again, answering in personal capacity,  
23 not necessarily. I'm referring here to a range of  
24 private APIs that -- that existed and were made  
25 available, not just friend data. And so I don't 05:17:10

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1 think that this pertains just to friend data or 05:17:14  
2 friend permissions.

3 In -- in this slide, based on my  
4 recollection, I'm talking about a proposal for --  
5 for -- for whitelisting processes for a range of 05:17:26  
6 APIs that -- that might be considered important to  
7 govern.

8 Q. And that range included friend data,  
9 right?

10 A. After the deprecation of -- of API 05:17:39  
11 version 1 from the public surface area, the friend  
12 permissions and data were made available only to  
13 whitelisted applications. Again, I think the  
14 definition of whether or not that's considered  
15 sensitive is -- is subjective, which is why I'm 05:17:53  
16 being -- trying to be clear in answering your --  
17 your question.

18 There was certainly, after the public  
19 deprecation, a set of private capabilities that  
20 were not -- were not available to regular 05:18:06  
21 developers.

22 Q. Does Facebook consider friend data  
23 sensitive?

24 MR. SCHWING: Object to form.

25 THE DEPONENT: I think Facebook considers 05:18:16

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1 any data important to govern properly. And so like 05:18:20  
2 even -- I don't think it's right to just  
3 characterize friend data as -- as sensitive. I  
4 think Facebook takes privacy of information very  
5 seriously and does a -- a number of things to 05:18:37  
6 ensure that data is being properly used.

7 Q. (By Mr. Loeser) Mr. Cross, I appreciate  
8 that. I asked you a very specific question. So  
9 I'll ask it again. If you could answer yes or no  
10 or let me know if it's not possible to answer yes 05:18:52  
11 or no, I'd appreciate it.

12 Does Facebook consider friend data  
13 sensitive?

14 A. I don't think I can answer that on behalf  
15 of Facebook, because I don't know how to answer 05:19:05  
16 "does Facebook think." I can answer from -- you  
17 know, from a personal capacity, but it's hard to --  
18 to determine whether or not Facebook thinks --  
19 would concern it as -- as quite sensitive.

20 Again, I think the definition of 05:19:21  
21 "sensitive" is -- is somewhat subjective.

22 Q. Is there any definition of "sensitive"  
23 Facebook uses that does not include friend data?

24 A. I don't think Facebook has a formal  
25 definition of "sensitive," right? This is why I'm 05:19:38

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1 trying to give you the best answer I can. 05:19:41

2 So I -- I certainly think user data is  
3 considered sensitive.

4 Q. All user data is considered sensitive?

5 A. User data is important to manage 05:19:57  
6 appropriately and is therefore -- like could be  
7 considered -- could be considered sensitive.

8 But, again, I don't have a formal  
9 definition of "sensitive." I don't think there is  
10 a formal definition of "sensitive" that the company 05:20:10  
11 uses.

12 MR. LOESER: Can we go to the next  
13 exhibit.

14 Oh, actually, before we do that, can we  
15 go back to the last page of the last exhibit. 05:20:42

16 Q. (By Mr. Loeser) The second "why" that  
17 you read was "[REDACTED]" to  
18 enable [REDACTED] for the future."

19 Did that happen in -- in the transition  
20 from Graph API version 1 to version 2 and in the 05:21:05  
21 months after when -- whitelisting was happening?

22 A. You mean -- you mean specific to time as  
23 part v1 to v2 transition? Is that what you're --  
24 you're interested in?

25 Q. Yes. 05:21:26

1           A. And the whitelist specific to the                                 05:21:27

2 transition?

4           A.    I think there's a -- let me make sure I'm  
5    answering this correctly for you.  Give me a second           05:21:39  
6    just to collect my thoughts.

11 I think the -- the intent here is -- is  
12 suggesting some formal process or some -- some set  
13 of mechanisms. I don't think there is a -- there  
14 was no way that I'm -- I'm aware of that captured  
15 the decisions and commitments to -- around how 05:22:38  
16 whitelisting was made in a centralized way.

19           A. I think it depends on what the definition  
20       of "proper auditing" is, so that -- that's -- 05:23:01  
21       that's a subjective definition.

25	Q. And Facebook did not have that system at	05:23:18
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## HIGHLY CONFIDENTIAL

1 the time of the transition to Graph -- 05:23:21

2 A. The system that exists today did not  
3 exist in -- in 2013.

4 Q. And did Facebook have some other rigorous  
5 system previously? 05:23:31

6 MR. SCHWING: Objection. Vague.

7 THE DEPONENT: Yeah -- we -- there's --  
8 there's a tool for managing -- for managing  
9 whitelists and who -- who has access to what.

10 There was no centralized process to track 05:23:43  
11 how or why a given app was accessed -- was added to  
12 a whitelist.

13 Q. (By Mr. Loeser) Okay. We can go to the  
14 next document.

15 You should see in a moment an email from 05:24:03  
16 you to Gareth Morris and to yourself dated  
17 May 1st, 2014. Subject "message summary."

18 (Exhibit 403 was marked for  
19 identification by the court reporter and is  
20 attached hereto.) 05:24:15

21 THE DEPONENT: I see, yeah.

22 Q. (By Mr. Loeser) And it appears that this  
23 email captures a chat between you and Mr. Morris;  
24 is that right?

25 A. Yes, I think this represents a chat 05:24:30

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1 thread. 05:24:33

2 Q. Who is Gareth Morris?

3 A. Gareth Morris is a partner engineer at  
4 Meta.

5 Q. And by sending this message to yourself, 05:24:45  
6 was that a way of keeping a record of this chat?

7 A. I'm not -- sorry. I don't think I sent  
8 this to myself. The way this is represented is  
9 likely an artifact of Facebook's retention systems.

10 Q. Okay. And May 1st, 2014, the date of 05:25:04  
11 this -- this chat, that was after the public  
12 announcement at the new platform at the 2014 F8; is  
13 that right?

14 A. Yes. The -- the changes were announced  
15 on April 30th, 2014, so this would have been after 05:25:27  
16 that.

17 Q. So at this point the public announcement  
18 had been made and process of transitioning  
19 deprecated permissions from the public to the  
20 private platform was underway, right? 05:25:38

21 A. At this point, yes, the migration from  
22 API v1 to v2 for public developers had begun, yes.

23 Q. And looking through this chat, it appears  
24 that it's in chronological order, so we can stop at  
25 the top and you can read through it. 05:25:58

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1 Mr. Morris says to you, "I expect we'll 05:26:00  
2 hear questions like this from developers impacted  
3 by friends\_\*deprecations: 'Is there any way for  
4 trusted partners to continue to access full friend  
5 list/friends\_\*data in v2.0?'" 05:26:17  
6 Did I read that correctly?  
7 A. You read that correctly.  
8 Q. And then Mr. Morris goes on to say "On  
9 full friend list, I know we will whitelist certain  
10 apps that have meaningful experiences ( [REDACTED] 05:26:30  
11 etc) but do you know what the criteria are and if  
12 we are communicating it externally at all?"  
13 Did I read that correctly?  
14 A. You read that correctly.  
15 Q. So at this point in time, Facebook had 05:26:43  
16 made the decision to whitelist certain apps that  
17 have meaningful experiences; is that right?  
18 MR. SCHWING: Objection. Vague.  
19 THE DEPONENT: I don't think it's right  
20 to say that Facebook had decided to whitelist 05:27:01  
21 certain applications. So -- so no, I don't think  
22 that's like -- it's right to say that Facebook had  
23 made that decision.  
24 Q. (By Mr. Loeser) Would -- but that  
25 Facebook's plan generally though, right? 05:27:11

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1 MR. SCHWING: Objection. Vague. 05:27:14

2 THE DEPONENT: Again, I don't think -- I

3 don't think it's right to say that's Facebook plan

4 generally. My -- speaking from my involvement at

5 the time, there were discussions about what -- 05:27:27

6 which -- which apps should or should not be

7 whitelisted for -- for different things, and there

8 was an active discussion about what would be done,

9 so I don't think any -- many decisions had been

10 made. 05:27:45

11 Q. (By Mr. Loeser) Okay. And Mr. Morris

12 goes on to say to you "And I'm guessing no

13 exceptions to friends\_\* in v2.0."

14 Did I read that correctly?

15 A. You read that correctly. 05:27:56

16 Q. Okay. Read for me your next four chats.

17 A. So the next four things say "We may not

18 even whitelist [REDACTED] for non-app friends."

19 The next thing is "there's whitelists for

20 all these things." 05:28:19

21 "But we'd only grant in strategic use

22 cases."

23 "Like the upcoming [REDACTED]

24 integration."

25 Q. So it sounds like at the time you 05:28:33

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1 believed there were -- there were whitelists that 05:28:34

2 were in place or going to be in place, right?

3 A. At the time --

4 MR. SCHWING: Objection.

5 THE DEPONENT: -- again, using -- 05:28:41

6 MR. SCHWING: Sorry, Mr. Cross. I

7 just -- give me one second to object. I know it's

8 a -- it's a -- challenging to do.

9 Objection. Vague.

10 Go ahead. 05:28:50

11 THE DEPONENT: Again, going back to my

12 personal recollection at the time is that it was

13 thought that there would be whitelists for various

14 things or it was possible to make whitelists for

15 various things -- by "these things" referring to 05:29:05

16 the set of changes in API version 1 to version 2.

17 So my -- my recollection, again, eight

18 years ago is that -- there was -- there was either

19 some whitelist in place or discussion about whether

20 or not additional whitelists should be in place. 05:29:27

21 Q. (By Mr. Loeser) And -- and what you told

22 Mr. Morris in -- response to his question about

23 whitelists, "but we'd only grant in strategic use

24 cases"; is that right?

25 A. What it says on -- in the thread is that 05:29:45

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1 we'd only grant in strategic use cases, yeah. 05:29:46

2 Q. And that was your understanding of what  
3 Facebook was going to do, right?

4 A. Was that -- again, I don't think it's  
5 appropriate to say that's my understanding of what 05:29:56

6 Facebook was going to do. My understanding at --  
7 at -- that's my understanding at -- at the time is  
8 that -- there would be some -- some whitelists and

9 some apps added to them. But -- and my  
10 understanding at the time was that that would be in 05:30:16  
11 some certain use cases.

12 Q. Well, this doesn't say "some certain use  
13 cases," does it? It says "strategic use cases,"  
14 right?

15 A. It says "strategic use cases," yes. 05:30:27

16 Q. And it was your practice when  
17 communicating with your colleagues to provide them  
18 with truthful and accurate information?

19 MR. SCHWING: Objection. Vague.

20 THE DEPONENT: I do my best normally 05:30:41  
21 to -- to communicate my understanding of things  
22 accurately, yes.

23 Q. (By Mr. Loeser) So Mr. Morris goes on  
24 and writes, "For someone like [REDACTED] it's just a  
25 'sorry, this stuff is in gone in v2.0,'" right? 05:30:56

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1 Did I read that correctly? 05:31:01

2 A. You read that correctly.

3 Q. And read for me your -- your next two  
4 chats which are your response to his question.

5 A. The next two lines are "Yep. Unless we 05:31:11  
6 see some strategic value in their existence."

7 Q. So you confirmed for Mr. Morris that  
8 perhaps like [REDACTED] he should tell them there are  
9 no exceptions for friend deprecations and this  
10 stuff is gone in v2.0, right? 05:31:32

11 A. I'm not confirming anything here in -- in  
12 the sense that it's a formal or final answer. I'm  
13 representing my understanding of the -- the  
14 position at the time.

15 Q. Okay. And that is the approach, as you 05:31:52  
16 say, "unless we see some strategic value in their  
17 existence," right?

18 A. What it says here is "unless we see some  
19 strategic value in their existence."

20 Q. And does "we" -- 05:32:05

21 A. I can provide --

22 Q. I'm sorry.

23 A. Sorry. You -- please ask your question.

24 Q. Yes. The "we" here refers to Facebook,  
25 right? 05:32:14

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1 A. The next line is "[REDACTED]" 05:33:44

2 etc., etc."

3 Q. Okay. So what did Facebook do for Bing  
4 and Firehose?

5 A. So, again, I'm relying on my recollection 05:33:55  
6 here of a -- of an integration from eight years  
7 ago, so I'll do my best to describe it generally.

8 My understanding is there was an  
9 integration with Bing to enable them to index  
10 public Facebook content such that when you searched 05:34:15  
11 for things on Bing, it would allow Bing to return  
12 public content from Facebook in Bing search  
13 results.

14 Q. And did Facebook have a contract with  
15 Bing? 05:34:33

16 A. My understanding is yes, Facebook had a  
17 contract with Bing to govern that interrogation.

18 Q. And did Facebook get some data back from  
19 Bing?

20 MR. SCHWING: Objection. Vague. 05:34:45

21 THE DEPONENT: I'm not sure what was in  
22 the contract or -- or -- or what the -- how the  
23 integration worked in detail.

24 Q. (By Mr. Loeser) What about Firehose?

25 A. My understanding is that Firehose is 05:34:57

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1 technical mechanism by which that integration was 05:34:59  
2 powered.

3 Q. Do you know it was called Firehose?

4 A. I don't know why it was called Firehose I  
5 wasn't around for the -- for the naming of it. But 05:35:10  
6 Firehose is a -- a term that's used in the  
7 industry.

8 Q. And to mean what?

9 A. To mean an API that -- that streams  
10 information from one entity to another. 05:35:29

11 Q. And was it qualitative at all in terms of  
12 the quantity of information?

13 A. I don't think there's anything definition  
14 of what "quantity" means. But in this case, to  
15 make that integration work, my understanding is 05:35:48  
16 it's streaming public content from Facebook to  
17 Bing, which you can imagine being not an  
18 insignificant amount of information.

19 Q. And what is your next text?

20 A. The next line is "but these perms are 05:36:04  
21 gone for a reason."

22 Q. And what does "perms" mean?

23 A. In this context, "perms" means the friend  
24 permissions.

25 Q. And read your next text, please. 05:36:15



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1 MR. SCHWING: Objection. Vague, and it's 05:37:36  
2 outside of the scope of the deposition topics.

3 You can answer.

4 THE DEPONENT: So yeah. I mean, you're  
5 asking me a really -- a personal question here. I 05:37:45  
6 think it's -- it's reasonable to be concerned, as  
7 evidenced by the changes made to the platform,  
8 that apps might be using information from mine --  
9 to mine data.

10 Q. (By Mr. Loeser) We can put that exhibit 05:38:12  
11 aside.

12 I'm going to read a statement to you. If  
13 you can tell me what Facebook means by this  
14 statement.

15 And I'll to read it slowly so that 05:38:38  
16 Rebecca doesn't get mad.

17 "If an application asks permission from  
18 someone else to access your information, the  
19 application will be allowed to use that information  
20 only in connection with the person that gave the 05:38:52  
21 permission and no one else."

22 A. Sorry. Can you repeat that again. It  
23 would helpful to -- do you have it written,  
24 could -- could present? I want to make sure I'm  
25 fully understanding it. 05:39:12

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1 Q. I'll read it again. I don't have it 05:39:13  
2 written. And this relates to friend sharing, which  
3 is why -- which is why I'm asking.

4 "If an application asks permission from  
5 someone else to access your information, the 05:39:23  
6 application will be allowed to use that information  
7 only in connection with the person that gave the  
8 permission and no one else."

9 MR. SCHWING: Mr. Loeser, is there -- you  
10 read it. I'm confused a little bit what you're -- 05:39:39  
11 is there a question associated with it? I don't  
12 understand.

13 MR. LOESER: Yes. I would like to  
14 understand what Facebook means by that statement.

15 MR. SCHWING: Is there a document that -- 05:39:54  
16 I'm sorry. I just want to make sure. Is there a  
17 document that this is in that you could help the  
18 witness with? He's asked to see what it is.

19 MR. LOESER: Yeah, I can write it down on  
20 a piece of paper and we can put it up as an 05:40:03  
21 exhibit. It'll take a couple minutes, but -- this  
22 is just my effort to understand how friend sharing  
23 worked at Facebook.

24 So we can -- we can come back to that.  
25 And -- we'll write it down on a piece of paper and 05:40:16

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1 put it up as an exhibit. That's probably an 05:40:20  
2 effective way to do it.

3 MR. SCHWING: Okay. If you're -- and  
4 let's -- I don't want to take long on this, but if  
5 you're representing Facebook said something in a 05:40:27  
6 document, to be able to give the document, I think,  
7 is the appropriate way to approach the issue.

8 But if you want to move on to the next  
9 topic, that's fine.

10 MR. LOESER: Yeah. We'll come back once 05:40:38  
11 we create an exhibit.

12 MR. SCHWING: Just to be clear, I will  
13 ask that -- at that time that you actually give  
14 the -- the document as opposed to excerpting it.

15 Q. (By Mr. Loeser) Okay. We're going to 05:40:54  
16 screen share this sentence, and if you could tell  
17 me what this means as Facebook's corporate  
18 designee, I'd appreciate it.

19 A. It's hard --

20 MR. SCHWING: I'm sorry. Let me state an 05:41:09  
21 objection.

22 I object to taking snippets of  
23 unidentified documents and -- and putting them  
24 before the witness and asking the witness to  
25 explain what Facebook means by something that's 05:41:19

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1 excerpted. You should have the entirety of the 05:41:22  
2 document.

3 THE DEPONENT: Yeah. It's hard for me to  
4 answer this -- this question, again, accurately  
5 without understanding where this came from and -- 05:41:33  
6 and the context behind it. There's not enough here  
7 for me to give a reasonable answer, I think.

8 Q. (By Mr. Loeser) Can you read the  
9 sentence and give me your -- your understanding of  
10 what it means. 05:41:53

11 MR. SCHWING: Special Master Garrie, I  
12 don't want to difficult during this deposition, but  
13 I would appreciate -- I'd like to make a motion  
14 under Rule 30 that if -- if they're asking about  
15 a -- a document and a purported Facebook document 05:42:03  
16 that they actually use the document so that the  
17 witness can properly answer.

18 SPECIAL MASTER GARRIE: Yeah, I was going  
19 to rule, but the witness answered the question.

20 Counsel Loeser, do you have the entirety 05:42:13  
21 of the document?

22 THE DEPONENT: I don't, and there's no  
23 requirement for me to show this witness any  
24 documents. I'm asking the question --

25 SPECIAL MASTER GARRIE: No, no. 05:42:25

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1 MR. LOESER: I'm asking the witness about 05:42:26  
2 this document.

3 SPECIAL MASTER GARRIE: Just so I  
4 understand, you're asking them -- you're asking the  
5 witness what this sentence means as a 05:42:33  
6 representative of Facebook, not in reference to a  
7 particular document Facebook has, but just  
8 generally?

9 THE DEPONENT: That's right. I'm just  
10 asking what this -- if this sentence means anything 05:42:42  
11 to Facebook.

12 MR. SCHWING: But, Special Master Garrie,  
13 he's representing that this is a statement by  
14 Facebook, and it's snipped out from something.  
15 We have no idea what it is. 05:42:51

16 SPECIAL MASTER GARRIE: Well, Counsel  
17 Loeser --

18 MR. SCHWING: If we could talk about it  
19 off the record, that would be wonderful.

20 SPECIAL MASTER GARRIE: Yeah, can we -- 05:42:56  
21 well, on the record, let me just get clarification.  
22 Counsel Loeser, is this, you're  
23 representing, a statement from Facebook?

24 MR. LOESER: This is a statement that  
25 Facebook has made, yes. 05:43:08

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1 SPECIAL MASTER GARRIE: Do you have any 05:43:12  
2 further context as to who, what, when, or where?  
3 MR. LOESER: I do --  
4 SPECIAL MASTER GARRIE: Or do you not --  
5 MR. LOESER: Yeah, we can introduce it. 05:43:22  
6 I'm surprised the witness isn't familiar with this  
7 statement, but we can introduce the statement.  
8 There's no requirement for us to --  
9 SPECIAL MASTER GARRIE: I'm not saying  
10 there is -- there is -- 05:43:35  
11 MR. LOESER: Fine. That's fine. We're  
12 happy to introduce the statement, but I want to  
13 understand about this statement is what it means to  
14 Facebook. So we'll introduce the statement --  
15 SPECIAL MASTER GARRIE: Right, so -- 05:43:44  
16 MR. LOESER: -- the policy.  
17 SPECIAL MASTER GARRIE: So if you -- if  
18 you want to know what the statement means in  
19 general from what Facebook says, that's different  
20 than saying this is a statement Facebook has made, 05:43:53  
21 what does it mean to Facebook.  
22 So I'm just trying to understand which of  
23 the two courses you're going down.  
24 MR. LOESER: I started on the first  
25 course and I'm happy to stay there. This is a 05:44:05

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1 statement, what does it mean to you. If it means 05:44:06  
2 nothing to him, then he can say that.

3 SPECIAL MASTER GARRIE: Yeah, got it.  
4 That's all I needed to know.

5 So, Counsel Schwing, I appreciate your 05:44:12  
6 position, but I don't think it's an issue, so he's  
7 simply as Facebook's 30(b)(6) representative, what  
8 does this statement mean.

9 MR. SCHWING: Okay. And just -- I  
10 appreciate that, Special Master. For the record, I 05:44:24  
11 think it's difficult, if not impossible, without  
12 any context with respect to what the document is or  
13 the time frame or anything like that to pluck out  
14 the statement and have him ask, answer on behalf of  
15 the company about what this means. There's just 05:44:41  
16 not enough context.

17 I would appreciate it if the document  
18 would be -- would be put up, since counsel  
19 has indicated that they have the document.

20 MR. LOESER: Yeah. You know, we can cut 05:44:53  
21 this short. We can just introduce -- it's already  
22 an exhibit, so we can just refer to the exhibit.  
23 We can focus on this.

24 And, again, the purpose of my asking  
25 Mr. Cross this is -- 05:45:00

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1 SPECIAL MASTER GARRIE: I understand. 05:45:01

2 MR. LOESER: Yeah.

3 SPECIAL MASTER GARRIE: Yeah, I get it,

4 Counsel Loeser. So, I mean, if you want to do that

5 for Facebook, you're under no obligation to do 05:45:07

6 such, but if you want to produce it, that would be

7 probably be effective in aiding in the testimony

8 you're trying to obtain. But you're under no

9 obligation to do such. So...

10 MR. LOESER: We're going to go ahead and 05:45:22

11 introduce it, just because I think it satisfies

12 Mr. Schwing's concern.

13 MR. SCHWING: I would appreciate that,

14 Mr. Loeser. Thank you.

15 MR. LOESER: This is Exhibit 400. 05:45:34

16 This is the data use policy.

17 Yeah, and the reason why we didn't send

18 this over to Mr. Cross is we didn't actually intend

19 to introduce the exhibit. But to satisfy counsel's

20 concerns about the context of this statement, we're 05:45:54

21 introducing the data use policy.

22 Q. (By Mr. Loeser) And my question is

23 really very specific. It's not about what anyone

24 else might think this means; it's specifically what

25 Facebook thinks this means. I'm asking the 05:46:09

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1 question so that I can understand how Facebook 05:46:12  
2 believes friend sharing works.

3 So if we can -- we'll try and find the  
4 statement.

5 MR. SCHWING: While you're scrolling for 05:46:27  
6 that, I object to using documents that were not  
7 provided to us in advance as required under our  
8 protocol.

9 And the policies are outside of the scope  
10 of -- of Mr. Cross's deposition topics. 05:46:35

11 Q. (By Mr. Loeser) Okay. So, Mr. Cross,  
12 the data use policy is in front of you.

13 And do you see the statement "If an  
14 application asks permission from someone else to  
15 access your information, the application will be 05:46:54  
16 allowed to use that information only in connection  
17 with the person that gave the permission and no one  
18 else"?

19 Do you see that statement?

20 A. I do see that statement. 05:47:04

21 Q. What does that statement mean?

22 MR. SCHWING: Outside the scope of the  
23 deposition.

24 THE DEPONENT: So, yeah, I'm not an  
25 expert in interpreting Facebook's platform policies 05:47:12



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1 or data use policies. I think there are other 05:47:15  
2 people that your -- that are testifying who are  
3 better placed to interpret that.

4 I can give you a personal interpretation  
5 or my personal understanding of that, but I think 05:47:30  
6 there are -- there are other people who -- who are  
7 more knowledgeable about this subject than me that  
8 would give you a more accurate answer.

9 Q. (By Mr. Loeser) Okay. And I'm really  
10 trying to understand it from the technology 05:47:42  
11 standpoint, which is why I'm asking you.

12 So why don't you go ahead and give me  
13 whatever explanation for this statement that you  
14 can.

15 MR. SCHWING: Object to the scope. 05:47:52

16 Go ahead if you can answer in your  
17 personal capacity.

18 THE DEPONENT: Yeah, I'll answer in my  
19 personal capacity and my understanding having --  
20 having worked on this area but not being an expert 05:48:02  
21 in interpreting or enforcing Facebook's policies in  
22 this matter.

23 My understanding is that what this means  
24 is when an app ask permission -- "permissions" in  
25 this case, I think, refer to -- to the Facebook 05:48:18

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1 platform permissions -- to access your information, 05:48:20  
2 my interpretation of that is the friend  
3 permissions. The -- or indeed the read stream  
4 permission, which includes friends information.

5 The -- the -- the data that the app 05:48:38  
6 receives through a given user's access token from a  
7 technical capacity should be used to enhance the  
8 experience of that user in the application only.

9 Q. (By Mr. Loeser) Thank you.

10 Okay. We can move on. 05:48:57

11 MR. LOESER: Tab 53.

12 (Exhibit 404 was marked for  
13 identification by the court reporter and is  
14 attached hereto.)

15 Q. (By Mr. Loeser) You're going to see in a 05:49:33  
16 moment an email from KP to several people,  
17 including Marne Levine and Ime Archibong, and the  
18 date of the email is December 18th, 2018, and the  
19 subject is "private API review."

20 There's an attachment to this email, 05:49:52  
21 "private\_API\_review\_vF\_pptx;  
22 private\_API\_review\_vF.pdf."

23 Do you see that?

24 A. I see that, yeah.

25 Q. And this is Exhibit 404. 05:50:07

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4	Q. Yeah.
---	----------

7 MR. LOESER: Is there a way to put up the  
8 PDF as well?

12 THE DEPONENT: Great. Thank you.

15	Q. (By Mr. Loeser) It's on its way.	05:51:31
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16	A. Cool. Thank you.
----	---------------------

19 Cool. I've reviewed both of those

20	before. Thank you.	05:52:40
----	--------------------	----------

21 Q. Okay. So --

22           A.    I appreciate you guys giving me the time  
23   to read these things.

24 Q. Yes, of course.

25	Looking back at the email itself, KP	05:52:48
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## HIGHLY CONFIDENTIAL

1 writes, "Hello, Marne and all. Please find 05:52:54  
2 attached a deck summarizing our thinking around the  
3 private API review that (1) outlines the problem,  
4 (2) explains what we're doing about it broadly  
5 including what partnerships will do specifically, 05:53:08  
6 and (3) how we might accelerate the effort. In  
7 short..."

8 Do you see that?

9 A. I see that.

10 Q. And then do you see the heading 05:53:20  
11 "Problem"?

12 A. I do.

13 Q. Okay. And No. 1 on the problem. Why  
14 don't you go ahead and read No. 1.

15 A. Sure. 05:53:35

16 "Partners maintained access [REDACTED]  
17 [REDACTED] even after featured [REDACTED] have  
18 [REDACTED] (i.e. [REDACTED]  
19 [REDACTED] in 2015  
20 but [REDACTED] etc. maintained 05:53:51  
21 [REDACTED] until recently -- this is probably the  
22 main theme of the NYT story that is expected to  
23 land today)."

24 Q. And can you explain what this is  
25 identifying any more than what you just read? 05:54:10

1 A. I'll do my best. Again, this is an email 05:54:24  
2 written by somebody else, so I give you my -- my  
3 interpretation of that email from my understanding  
4 and conversations with people in preparation, which  
5 is that there were partners; i.e. apps, that were 05:54:35  
6 on whitelists where the -- their usage of those  
7 [REDACTED] was [REDACTED]  
8 [REDACTED] but they were still [REDACTED], and  
9 that potentially allowed them [REDACTED]  
10 [REDACTED] 05:55:05  
11 That's my understanding from this  
12 reading.  
13 Q. And did those features include access to  
14 friend data?  
15 A. I'm not sure what -- what KP's referring 05:55:16  
16 to here specifically. He -- he calls out instant  
17 personalization and search integrations. It's --  
18 it's possible that he's casting a wider net, but --  
19 I would be speculating.  
20 Q. Okay. And what -- can you read Problem 05:55:33  
21 No. 2 that's identified here.  
22 A. In the email, again, it says "It's not  
23 clear what [REDACTED] to those  
24 APIs (if any)."  
25 Q. Okay. And can you what the problem was 05:55:50

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1 here? 05:55:52

2 MR. SCHWING: I will caution the witness  
3 not to reveal anything that may be attorney-client  
4 privilege.

5 But if you can answer without revealing 05:55:59  
6 that, please do.

7 THE DEPONENT: Yeah, my -- again, it --  
8 I -- I don't know what KP means specifically.  
9 It's -- it's his email, and he's -- he's the source  
10 of truth as to what he was referring to. 05:56:17

11 I can answer given -- given my -- my  
12 understanding, which is that there were the  
13 standard platform developer policies and -- and  
14 typically Facebook [REDACTED] with some  
15 developers to [REDACTED] and my 05:56:39  
16 understanding -- my understanding was -- my  
17 understanding is that it was not known what -- what  
18 [REDACTED]

19 But, again, I want to caveat what I've  
20 just given there with I'm -- I'm not super close to 05:57:04  
21 the -- to the terms here. So that's -- that's the  
22 best answer I can give.

23 But -- it's the best answer I could give.

24 Q. (By Mr. Loeser) Okay. And Problem  
25 No. 3, "Partners have access to private APIs that 05:57:21

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1 may not be valuable to Facebook that we need to 05:57:24  
2 review and deprecate or secure support for future  
3 investments."

4 Did I read that correctly?

5 A. You read that correctly. 05:57:36

6 Q. What does it mean in this context for  
7 private APIs that may not be valuable to Facebook?

8 MR. SCHWING: Object to the extent it's  
9 outside of the scope of topics 6 and 7.

10 THE DEPONENT: Yes, it's hard for me 05:57:48  
11 to -- to answer that question on behalf of the  
12 Facebook. I can give you, again, my -- my  
13 understanding and my interpretation, having been  
14 involved to this and spoken to people involved.

15 There are at this point a number of -- of 05:58:03  
16 private APIs or permissions that existed, and the  
17 purpose for which those were introduced may -- and  
18 the reasons for which those were introduced may --  
19 may -- the developer ecosystem uses expectations  
20 and so on would have changed and so the -- the 05:58:29  
21 purpose for which they were originally built might  
22 not make sense anymore.

23 Q. (By Mr. Loeser) Okay. And what does  
24 "secure support for future investments" mean in  
25 this context? 05:58:48

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1 MR. SCHWING: Calls for speculation. 05:58:54

2 THE DEPONENT: Yeah, I -- it's -- it's  
3 hard for me to what -- what -- what he means by  
4 this in this email, so I'd be speculating as to --  
5 to what he means. 05:59:01

6 Q. (By Mr. Loeser) He writes "We need to  
7 review and deprecate or secure support for future  
8 investments."

9 Does that help you answer the question to  
10 look at it in that context? 05:59:09

11 A. So, again, like I'm -- I'm not sure what  
12 he means by "secure support for further  
13 investment." So -- so I could speculate as to what  
14 that might mean, but I don't think that's  
15 appropriate to do here. 05:59:25

16 Q. Okay. If you look at the next header, it  
17 says "Actions to be Taken." And -- and based on my  
18 read of this, it appears that Facebook launched an  
19 effort to [REDACTED]  
20 [REDACTED] 05:59:44

21 Did that, in fact, happen?

22 A. Yes, it did.

23 Q. Okay. And if you look at No. 3, it's --  
24 well No. 2 is "remove access for those APIs that  
25 have been since been deprecated," right? 05:59:57

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1 A. Sorry. Can you point out that again? I 06:00:01  
2 just want to make sure. Bullet No. 2?

3 Q. The second action to be taken says  
4 "remove access for those APIs that have since been  
5 deprecated," right? 06:00:09

6 A. That's what I see on the email here,  
7 yeah.

8 Q. And then the third action: "Together  
9 with product, assess whether certain private APIs  
10 need to be maintained, supported. This will fold 06:00:20  
11 into the so-called project Frozen."

12 Did I read that correctly?

13 A. You did read that correctly.

14 Q. Do you know what project Frozen is?

15 A. I'm not entirely what -- what project 06:00:38  
16 Frozen -- he's referring to with project Frozen  
17 here. Again, I -- I can -- there's a -- there was  
18 [REDACTED] which he could be referring to.

19 But he's -- again, he's using the caveat "so-called  
20 project Frozen," so he may be referring to a -- to 06:00:55  
21 a different code name here.

22 Again, I -- I'd be speculating, and KP is  
23 the source of truth.

24 Q. So No. 4, it looks like after assessing  
25 certain private APIs, the idea was to "[REDACTED]" 06:01:09

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1 [REDACTED] to ensure they retain 06:01:12

2 access to those private APIs."

3 Did I read that correctly?

4 A. You read that correctly, yeah.

5 Q. And did that happen? 06:01:19

6 A. I -- I don't know whether or not that

7 happened. I'm -- I'm not familiar with the precise

8 things that were -- were done as part of this

9 project, so I can't comment as to whether or not

10 that -- that happened. 06:01:37

11 Q. And did the private APIs being accessed

12 include APIs that emitted friend data?

13 A. Yes. My understanding is that this

14 effort looked at all private APIs and capabilities

15 that existed at the time. 06:01:57

16 Q. And so in 2018, those private apps and

17 capabilities including those that emitted friend

18 data?

19 A. Well, at this point, the -- the friend

20 permissions had been fully removed from the code 06:02:21

21 base, and there's a number of -- this covers every

22 API and private API or whitelists or permission

23 that was gated behind a capability.

24 I can't say for certain what that full

25 set of things would have included. 06:02:38

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1 Q. But the idea certainly was to [REDACTED] 06:02:42

2 [REDACTED]

3 [REDACTED] right?

4 A. My understanding is yes, the intent of

5 this was to -- was to do a -- perform a 06:02:52

6 [REDACTED] -- of

7 [REDACTED]

8 [REDACTED]

9 Q. Okay. If we can go down to the

10 [REDACTED] And you 06:03:05

11 see the first bullet there.

12 And it states: [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] 06:03:26

16 Did I read that correctly?

17 A. You did, yeah.

18 Q. And so fair to say that Facebook believes

19 that [REDACTED]

20 [REDACTED] 06:03:41

21 MR. SCHWING: Object to the form.

22 Outside the scope.

23 THE DEPONENT: So, again, this is an

24 email from KP, and KP is asserting that he believes

25 that [REDACTED] 06:03:55

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1 [REDACTED] 06:03:59

2 Q. (By Mr. Loeser) And was KP considered a  
3 knowledgeable person about these topics at  
4 Facebook?

5 MR. SCHWING: The question is vague. 06:04:08  
6 Calls for speculation.

7 THE DEPONENT: Yeah. I mean, hard --  
8 hard -- hard to answer that question. Yeah, I  
9 don't know how KP was perceived by -- by various  
10 people at the company. He was certainly 06:04:19  
11 knowledgeable as a platform partnerships person.

12 Q. (By Mr. Loeser) And fair to say that  
13 Facebook believed that he had an adequate  
14 understanding of what a sensitive private API was?

15 MR. SCHWING: Outside of the scope. 06:04:34  
16 Object to the form.

17 THE DEPONENT: Yeah, hard for me to  
18 answer on behalf of Facebook and what -- what  
19 Facebook as -- as an entity thinks.

20 I can give you my -- my view. But -- but 06:04:45  
21 I don't feel I can answer that on behalf of the  
22 company as such.

23 I think he was knowledgeable about --  
24 about the Facebook developer platform and which  
25 APIs existed and what -- what they were being used 06:05:00

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1 by -- how they were being used by developers. 06:05:07

2 Q. (By Mr. Loeser) Who at Facebook can  
3 answer the question in the way that -- that would  
4 describe Facebook's corporate understanding of what  
5 is a sensitive private API? 06:05:21

6 MR. SCHWING: Object to the scope. Calls  
7 for speculation.

8 THE DEPONENT: I mean, it -- I think,  
9 again, "sensitive" is -- is a subjective  
10 definition. "Private API," I think we've covered. 06:05:36  
11 "Sensitive" is subjective.

12 I would think that maybe the legal policy  
13 teams would be well placed to opine on that.

14 But, again, "sensitive" is not -- is a  
15 subjective term. 06:05:56

16 Q. (By Mr. Loeser) So who in the policy  
17 team could opine on -- on what Facebook means by  
18 "sensitive private API"?

19 MR. SCHWING: Outside the scope. Calls  
20 for speculation. 06:06:09

21 THE DEPONENT: Yeah, I -- I don't know  
22 who at the company would like names of -- of people  
23 that -- that would be able to give you an  
24 authoritative answer. Again, you're asking a very  
25 broad question. 06:06:22

## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Loeser) And do APIs that emit 06:06:24  
2 friend data emit PII data?  
3 MR. SCHWING: Object -- sorry.  
4 Objection. Vague. Outside the scope.  
5 THE DEPONENT: Can you help me understand 06:06:40  
6 what -- what you mean by PII data?  
7 Q. (By Mr. Loeser) Well, what does it mean  
8 here on this -- on this communication?  
9 MR. SCHWING: Calls for speculation.  
10 Outside the scope. 06:06:51  
11 THE DEPONENT: Yeah, I -- yeah, I can't  
12 give you an authoritative answer to that. I have  
13 my own understanding, but KP is the -- is the  
14 author of the email, and he's -- he's the one  
15 making these statements. 06:07:07  
16 Q. (By Mr. Loeser) Do you know what "PII"  
17 stands for?  
18 A. My understanding in this context is "PII"  
19 stands for personally identifiable information.  
20 Q. And does friend data provide personally 06:07:18  
21 identifiable information?  
22 MR. SCHWING: Objection. Vague. Calls  
23 for a legal conclusion.  
24 THE DEPONENT: Yeah, it's -- I'm not --  
25 I'm not able to make a formal determination of what 06:07:30

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1 PII includes or counts as PII. 06:07:33

2 Q. (By Mr. Loeser) So you're saying -- your  
3 testimony under oath today is you cannot testify as  
4 to whether friend data includes PII?

5 A. By giving you -- again, I'm trying to do 06:07:48  
6 my best here and give you an accurate -- an  
7 accurate and complete answer.

8 The definition of "PII" is -- is not  
9 defined, and so it's hard to give -- me to give you  
10 a complete -- complete answer. Right? 06:08:00

11 So I -- I just -- I'm not sure I can  
12 answer that question in a way that's like -- fully  
13 accurate. I could, you know, speculate and give  
14 you my personal take, but you're asking me to  
15 testify as to what Facebook considers PII, which is 06:08:14  
16 a -- a thing I'm -- I don't believe I'm well placed  
17 to give.

18 Q. Well, Mr. Cross, what do you believe PII  
19 is?

20 A. I think there's a range of definitions 06:08:28  
21 of -- of PII. One definition would be somebody's  
22 name and maybe their profile picture. You could  
23 argue that that is personally identifiable. There  
24 are cases where it's not personally identifiable.  
25 So hence -- hence the challenge giving a complete 06:08:50

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## HIGHLY CONFIDENTIAL

1 answer there. 06:08:55

2 Q. Okay.

3 MR. LOESER: Why don't we go to the  
4 PowerPoint itself. It's Exhibit 405.

5 (Exhibit 405 was marked for 06:09:10  
6 identification by the court reporter and is  
7 attached hereto.)

8 Q. (By Mr. Loeser) Again, Mr. Cross, you've  
9 had a chance to review this PowerPoint previously,  
10 right? 06:09:23

11 A. I have, yes.

12 Q. And did you also read it to prepare for  
13 your testimony today?

14 A. It was -- yes, it was supplied as one of  
15 the documents I -- I think you were potentially 06:09:32  
16 going to show me, so I -- I reviewed it in  
17 preparation for today, yes.

18 Q. And the title slide states "[REDACTED]  
19 [REDACTED]," right?

20 A. I see that, yeah. 06:09:45

21 Q. And what were the [REDACTED]  
22 [REDACTED]

23 MR. SCHWING: Objection. Vague.

24 THE DEPONENT: Yeah, I think there's a --

25 hard for me to -- to -- there's a number of the 06:09:59

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1 potential risks from -- from private APIs. I 06:10:03

2 couldn't enumerate them all.

3 Q. (By Mr. Loeser) Can you enumerate any of  
4 them?

5 A. Yes. I can attempt to enumerate some 06:10:19  
6 examples.

7 So there a number of -- as I said, a  
8 number of private APIs. One of the risks for an  
9 [REDACTED] is that it allowed developers to

10 [REDACTED] in 06:10:39  
11 order to allow a user to log in to an experience on  
12 a device.

13 And an app that had that capability,  
14 there were a number of risks around making sure  
15 that the [REDACTED] 06:10:55

16 [REDACTED] and that the [REDACTED]  
17 is -- is [REDACTED]

18 So that would be one -- [REDACTED] [REDACTED] from one  
19 [REDACTED].

20 Q. Are there [REDACTED] that emit 06:11:16  
21 friend data?

22 A. Again, there's many private APIs, and --  
23 and APIs that emit information about users or their  
24 friends. Facebook would want to make sure that  
25 those APIs and that information is being used 06:11:39

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1 appropriately and in accordance with our -- our 06:11:44  
2 terms.

3 Q. And are there [REDACTED] that relate  
4 to friend data that Facebook was concerned about?

5 MR. SCHWING: Objection. Vague. 06:11:56

6 THE DEPONENT: So we talked about this in  
7 a -- in a previous testimony around some of the  
8 reasons for the changes to the public API surface  
9 area. We'd had concerns from users that they were  
10 not always aware how their information was being 06:12:17  
11 used by -- by applications, and so in the case of  
12 private APIs, we would want to make sure that  
13 information was being used appropriately.

14 Q. (By Mr. Loeser) Can we go to --

15 MR. SCHWING: Mr. Loeser, just -- just 06:12:36  
16 quickly. We've been going for about an hour. I'm  
17 not saying we need to take a break right now, but  
18 at a convenient time in the next few minutes, if we  
19 could take a break, that would be great.

20 MR. LOESER: Sure. I'd like to get 06:12:48  
21 through this deck, and I'll try and do it quickly,  
22 but if it's taking too long, we'll stop before we  
23 get to the end.

24 THE DEPONENT: Thank you.

25 MR. SCHWING: Thank you. 06:12:56

## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Loeser) If you go to the next 06:12:57  
2 slide.

3 Do you see that "What is the problem?"

4 A. I see that, yeah.

5 Q. And am I reading this correctly: That in 06:13:01  
6 this analysis Facebook identified [REDACTED] private API  
7 application pairs that included [REDACTED]?

8 A. Well, again, what's on the slide here,  
9 I'm -- the author was KP. I -- I don't know how  
10 these data were compiled or collected. 06:13:28

11 But from rating the slide, somebody at  
12 Facebook, KP, seems to have identified [REDACTED] API --  
13 API application pairs that met some definition  
14 of -- of [REDACTED] which I'm not aware of the details  
15 of. 06:13:50

16 Q. And what is "a private API application  
17 pair"?

18 A. So I actually would be speculating if I  
19 knew precisely. I think I know what -- what this  
20 refers to. I would have used a different term. 06:14:05

21 So private API is a -- is an ambiguous  
22 term, and so I think he may have used a -- he may  
23 be referring to a different technical term. So I  
24 would actually be speculating if I -- if I  
25 confirmed that -- understanding -- if I confirmed. 06:14:27

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1 My understanding, speaking -- you know, 06:14:30  
2 trying to do my best here and trying to give you  
3 the best answer I can -- is that -- I understand  
4 him to be referring to capability app pairs. So  
5 that -- that -- that's my understanding of what 06:14:44  
6 he'd be referring to.

7 But private APIs is a little bit  
8 ambiguous in this context.

9 Q. Okay. And then the key issues that he  
10 identified, those appear to be the same, more or 06:15:00  
11 less, as the problems he identified in the cover  
12 email; is that right?

13 A. This maps pretty closely to what he  
14 identified in the email, yes.

15 Q. Okay. So we go to thing next slide. 06:15:15

16 "What we're doing about it, Private API  
17 Review."

18 Do you see the product heading?

19 A. Yup, I see it.

20 Q. He writes "Following our [REDACTED], 06:15:26  
21 Product is introducing new steps to grant new  
22 access to new external-facing, private APIs gated  
23 by capabilities. While this addresses issues  
24 moving forward, we still have an uncertain past  
25 that needs to be cleaned." 06:15:41

## HIGHLY CONFIDENTIAL

1 Do you see that? 06:15:43

2 A. I do see that, yeah.

3 Q. And what was the [REDACTED]?

4 A. So the [REDACTED] was an announcement

5 in -- I actually have the -- the rough dates 06:15:54

6 here -- on the November the 1st, 2018, that

7 [REDACTED]

8 [REDACTED]

9 Q. And why was the [REDACTED] put in  
10 place? 06:16:15

11 A. My understanding is that the [REDACTED]  
12 [REDACTED] was put in place to give the company  
13 time to [REDACTED] and  
14 how they were being used as well as to develop new  
15 processes and practices for controlling changes to 06:16:38  
16 APIs going forward.

17 Q. And -- and what events prompted that  
18 [REDACTED]

19 MR. SCHWING: Object to the scope.

20 Outside the scope. 06:16:52

21 THE DEPONENT: I'm -- I'm not sure,  
22 again, exactly what prompted that. So probably a  
23 number of factors that went into the -- the  
24 decision-making that I, you know, have not fully --  
25 I'm not fully aware of. So I can't answer fully as 06:17:09

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1 to what that was -- what drove that 06:17:16  
2 decision-making.

3 But, again, what I can share from my  
4 personal perspective is this is after the  
5 Cambridge Analytica story broke, and -- and I 06:17:28  
6 would -- my understanding is that was one of the  
7 drivers for improving development practices around  
8 APIs.

9 Q. (By Mr. Loeser) And if you look at the  
10 next heading, which says "Partnerships," this 06:17:44  
11 states "Partnerships will [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] that evolve in the future." 06:18:00

16 Did I read that correctly?

17 A. You did read that correctly.

18 Q. Did that happen?

19 A. My understanding is that broadly, yes,  
20 that did happen. 06:18:10

21 Q. We can go to the next slide. This title  
22 is "How Partnerships plans to read the cleanup."

23 And do you know specifically what is  
24 being cleaned up?

25 MR. SCHWING: It's outside the scope. 06:18:29

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1 THE DEPONENT: Let me -- let me just 06:18:34  
2 review the slide and see if I can give you an  
3 answer.

4 So having -- having read this, what's on  
5 the slide is the best answer I could give as what's 06:18:57  
6 being cleaned up here. I can provide commentary  
7 and some explanation if it would be useful, but I  
8 think the slide is actually a pretty good  
9 explanation of what was happening.

10 Q. (By Mr. Loeser) And generally speaking, 06:19:13  
11 was the idea to clean up the [REDACTED] and to  
12 [REDACTED] and those  
13 [REDACTED] they  
14 provide to Facebook?

15 MR. SCHWING: Objection. Vague. Outside 06:19:29  
16 the scope.

17 THE DEPONENT: My understanding is that  
18 this is primarily identifying -- reviewing private  
19 API pairs, which is a given capability and a given  
20 application that has that capability in an [REDACTED] 06:19:46  
21 [REDACTED] and [REDACTED]  
22 [REDACTED]

23 Q. (By Mr. Loeser) And why wasn't that done  
24 in 2015?

25 MR. SCHWING: Objection. Outside the 06:20:02

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1 scope. Vague. 06:20:03

2 THE DEPONENT: Yeah, I -- hard for me to  
3 comment on -- on -- on why this wasn't -- wasn't --  
4 why this -- this process continued later.

5 My recollection from the time is there 06:20:20

6 was an effort in 2013 to reduce the number of  
7 capability app pairs which existed, and so I think  
8 this is -- it's not right to characterize this as  
9 "not done" and "done." There were -- have been a  
10 number of efforts over a number of years to attempt 06:20:38  
11 to manage the -- the set of private APIs.

12 Q. (By Mr. Loeser) Okay. If you look at  
13 the "Investigate and Decide" stop on this -- on the  
14 plans on this slide.

15 The first bullet says "Investigate API 06:20:56  
16 access on questionable private API app pairs and  
17 contractual obligations."

18 Did I read that right?

19 A. You did read that right.

20 Q. And what are questionable private API app 06:21:07  
21 pairs?

22 MR. SCHWING: Outside the scope of topics  
23 6 and 7. It's vague.

24 THE DEPONENT: Again, it's hard -- I  
25 don't feel I can give a kind of answer on behalf of 06:21:18

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1 the company there. KP is the author of the deck 06:21:21  
2 and the source of truth as to what he means here.

3 Again, in the service of being helpful, I  
4 can -- I can give you the best answer I can give,  
5 which is that, for example, an app may have a 06:21:34  
6 capability that it is not using and therefore there  
7 is little value in it having the capability, and  
8 therefore the capability should be removed from the  
9 application.

10 So that would be an example of something 06:21:52  
11 that that I would personally would have determined  
12 to be a questionable private app pair. Put it  
13 another way: If it's not being used, why do they  
14 still have access to it.

15 Q. (By Mr. Loeser) The next bullet is "Set 06:22:07  
16 criteria on decision points (e.g. hi/low value of  
17 API usage."

18 What does "hi/low value of API usage"  
19 mean?

20 MR. SCHWING: Outside the scope. Vague. 06:22:20

21 THE DEPONENT: So, again, I can't -- I  
22 don't feel I can give you a company answer to that  
23 question. KP's the source of truth. I can give  
24 you my -- my interpretation, my understanding, as  
25 best I can with -- given my experience here. 06:22:33

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## HIGHLY CONFIDENTIAL

1                   So hi/low value of API and usage, in my                   06:22:38  
2                   estimation, would be -- would -- would revert --  
3                   would refer to the -- the value of the API in terms  
4                   of the value it provides to -- to users and to the  
5                   developer, and usage would refer to how often that                   06:22:57  
6                   API is being used or how -- how widespread that use  
7                   is by applications and uses.

8                   Q.     (By Mr. Loeser) And you gave one example  
9                   of an app API pair that is questionable. Can you  
10                  think of other examples?                                   06:23:28

11                  A.     Give me a second to make sure I can think  
12                  of some.

13                         So yeah. Another example might be where  
14                         an application has the ability to call a certain  
15                         API or access certain information where the -- the                   06:24:03  
16                         way in which that information is being used to  
17                         enhance the user experience is unclear or not  
18                         known.

19                  Q.     Would a misuse of user data by the app  
20                         also be considered the result of a questionable                   06:24:26  
21                         private API app pair?

22                         MR. SCHWING: The question is vague.  
23                         Outside the scope.

24                         THE DEPONENT: Again, hard to give a  
25                         detail. I can't give a representative company                   06:24:40

## HIGHLY CONFIDENTIAL

1 answer there. 06:24:42

2 My -- my understanding is that, yes,  
3 questionable means would -- would mean, to me, this  
4 is worth investigating as to why this app has this  
5 capability to make sure we are confident that the 06:24:56  
6 app should indeed have access to this capability.

7 Q. (By Mr. Loeser) Okay. You can go to the  
8 slide, and then we're just about finished with this  
9 document. Appreciate your patience.

10 A. Thank you. 06:25:10

11 Q. This is titled "What we need to move  
12 faster." And you'll see that this slide -- correct  
13 me if I'm wrong -- describes different types of  
14 review that could be done of the API app pairs; is  
15 that right? 06:25:26

16 A. Give me a second just to -- just to read  
17 the slide again.

18 MR. SCHWING: It's outside the scope for  
19 this witness.

20 THE DEPONENT: This is hard for me to 06:26:11  
21 interpret. I wasn't involved at the time in a  
22 personal capacity, I don't think it's appropriate  
23 for me to try and speculate on what -- what's meant  
24 here.

25 Q. (By Mr. Loeser) Sure. Well, let me ask 06:26:22

## HIGHLY CONFIDENTIAL

1 you a more specific question. 06:26:23

2 A. Thank you.

3 Q. You see on the far right there are in

4 bold letters the first line for each of these, one,

5 three months, six months, is a reference to "no 06:26:30

6 contract review"?

7 Do you see that?

8 A. I see that, yup.

9 Q. Okay. And then there's a description of

10 what would be done to investigate and decide with 06:26:42

11 regard that that was the approach.

12 Do you see that?

13 A. I think so. Sorry. Yes. I mean, I

14 see -- I see the slide.

15 Can you point me to the cell row you're 06:26:59

16 referring to.

17 Q. Yeah. If you look on the far left down

18 below one month, and there's columns of information

19 and titles for those columns on the far left, and

20 the first title is "No Contract Review." The 06:27:14

21 second title is "Strategic Partners Only." And --

22 A. Yes.

23 Q. -- the third is "All Partners Review."

24 Do you see that?

25 A. Yes, I see that, yes. 06:27:21

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## HIGHLY CONFIDENTIAL

1 Q. And so -- so for this -- those are the 06:27:23  
2 three options that are described for what Facebook  
3 could do to move faster; is that a fair read?

4 MR. SCHWING: Objection. Calls for  
5 speculation. It's outside the scope. 06:27:40

6 THE DEPONENT: Yeah, I -- it's hard for  
7 me to answer -- give you authoritative answer here.  
8 Like, I -- I, you know, we saw this document in  
9 preparation before. I was not involved at the  
10 time. So I'd be speculating as to exactly what -- 06:27:56  
11 what was meant here.

12 Q. (By Mr. Loeser) Well, this PowerPoint at  
13 its outset identified [REDACTED] what KP refers to  
14 private API application pairs, right?

15 A. He refers to [REDACTED] -- 06:28:16

16 Q. Okay.

17 A. -- private API, yeah.

18 Q. And it refers to a need to audit those  
19 pairs to identify questionable API access, right?

20 A. He does -- does refer to that. 06:28:31

21 MR. SCHWING: Sorry. Sorry. It's vague,  
22 outside the scope.

23 You can answer it, Mr. Cross.

24 Just give me one minute -- or one second  
25 to state my objection. 06:28:40

## HIGHLY CONFIDENTIAL

1 Thank you. 06:28:41

2 Mr. Loeser, I'm sorry. It may have  
3 become a bit garbled there. Can you just reask  
4 that?

5 MR. LOESER: Sure. We can just ask. 06:28:49

6 Q. (By Mr. Loeser) And it refers to the  
7 need to audit those pairs to identify questionable  
8 API access, right?

9 MR. SCHWING: Same objection.

10 Go ahead. 06:29:01

11 THE DEPONENT: It's what it says on the  
12 slide, yes.

13 Q. (By Mr. Loeser) Okay. And then the last  
14 slide in the deck describes potential audits that  
15 could occur, and one would involve no contract 06:29:12  
16 review; is that right?

17 MR. SCHWING: Calls for speculation.  
18 Outside the scope.

19 THE DEPONENT: Yeah, it's actually pretty  
20 hard for me to understand what -- what this 06:29:27  
21 slide -- what this slide means and what he's  
22 referring to here. This could be interpreted in a  
23 few different ways. It's not -- it's not -- it's  
24 not clear.

25 MR. LOESER: Okay. Well, why don't you 06:29:43

## HIGHLY CONFIDENTIAL

1 read the notes that are on that slide. Just take a 06:29:44  
2 second. We can -- I just have two more questions,  
3 and I want to make sure that you understand the  
4 context of this slide.

5 THE DEPONENT: Okay. I've read the -- 06:30:30  
6 the notes there.

7 Q. (By Mr. Loeser) I want to zero in on  
8 the -- the second type of review that's identified  
9 here, which is Strategic Partners Only, right?

10 A. Okay. 06:30:54

11 Q. And Strategic Partners Only is a subset  
12 of all partners, right?

13 A. I'm -- I'm not sure what KP is referring  
14 to with strategic partners only, whether or not  
15 this is a -- I'm not even sure what -- what he's 06:31:08  
16 referring to here and what -- what he's using as --  
17 as that definition for "strategic partners."

18 Q. Okay. Does it appear to be a smaller  
19 group of partners than the all partners review,  
20 just looking at the numbers reflected there? Isn't 06:31:19  
21 that a fair interpretation of that?

22 MR. SCHWING: These questions call for  
23 speculation and outside the scope.

24 THE DEPONENT: Yeah, I'd be speculating.  
25 Like it's -- it's possible that that's the case. 06:31:33

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1 It could also mean that different partners require 06:31:36  
2 different levels of review and time. I -- I don't  
3 know what he's referring to here specifically.

4 Q. (By Mr. Loeser) Who at Facebook could  
5 tell me whether there's a subset of partners called 06:31:46  
6 "strategic partners" at Facebook?

7 MR. SCHWING: Outside the scope. Calls  
8 for speculation.

9 If you know, you can go ahead and answer.

10 THE DEPONENT: So the platform 06:32:05  
11 partnerships team would probably be able to provide  
12 some additional context there. As I -- as I have  
13 said before, I don't think there's a standard  
14 definition for "strategic partner," and I think if  
15 there is, those definitions will change depending 06:32:18  
16 on -- on the division of Facebook that you're  
17 talking to and -- and different definitions over  
18 time.

19 So I'm not aware of a standard definition  
20 of what "strategic partners" means. 06:32:32

21 Q. (By Mr. Loeser) Last question. And if  
22 you go back to the second page of the deck where we  
23 referred to the number of private API application  
24 pairs.

25 Are all of those pairs reflected on a 06:32:42



## HIGHLY CONFIDENTIAL

1 whitelist? 06:32:49

2 A. I'm sorry. Can you help me understand  
3 the question? I think I know what you're asking,  
4 but it's a little imprecise.

5 Are they reflected on a whitelist? 06:33:05

6 Q. Yeah. Are these all whitelisted  
7 partners, basically? Is that how they -- that's  
8 how you're able to identify that these private API  
9 application pairs are what you would refer to as  
10 capability pairs, are those reflected on -- on 06:33:17  
11 whitelists? These are whitelisted partners?

12 A. So my understanding -- so first of all,  
13 I'm not entirely sure what KP is referring to. As  
14 I've -- as I've mentioned earlier, his definition  
15 of "private API" is a little ambiguous to me. So 06:33:35  
16 I -- I don't think I can give you a fully  
17 authoritative answer.

18 But, again, in personal capacity, my  
19 understanding is yes, he's referring to -- I think  
20 he's referring to capabilities as -- and 06:33:50  
21 specifically capability app pairs, and my  
22 understanding of that is the two have access to a  
23 capability. An app is whitelisted for it or is on  
24 a whitelist.

25 MR. LOESER: Thank you. 06:34:07

## HIGHLY CONFIDENTIAL

1 Let's go off the record. 06:34:08

2 Mr. Schwing, I asked that last question

3 because you've made a lot of scope objections. I

4 just want to make it clear to you that I'm asking

5 these questions because this is a -- relates to 06:34:21

6 whitelisting, and so I want to make sure the record

7 was clear on that. I hope that satisfies that,

8 sir.

9 THE VIDEOGRAPHER: Okay. It's 6:52 p.m.

10 (Recess taken.) 06:34:33

11 THE VIDEOGRAPHER: We're back on the

12 record. It's 7:57 p.m.

13 (Exhibit 406 was marked for

14 identification by the court reporter and is

15 attached hereto.) 07:39:23

16 MR. LOESER: Let me introduce another

17 exhibit. Momentarily, Mr. Cross, you'll see an

18 email from Rob Boyle to Eddie O'Neil, Shirley Sun,

19 and Drew Lackman dated March 27th, 2019. Subject:

20 "Escalation deck Rev" with an attachment of a slide 07:39:41

21 deck.

22 Q. (By Mr. Loeser) And, Mr. Cross, who is

23 Rob Boyle?

24 MR. SCHWING: I'm sorry, Derek. Just to

25 be helpful. This is Exhibit 406 for the record, 07:40:12

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## HIGHLY CONFIDENTIAL

1 right? 07:40:12

2 MR. LOESER: Yes. Yes, thank you for  
3 that. Exhibit 406.

4 I have not been reading the Bates numbers  
5 because -- frankly, it's just time, but the Bates 07:40:18  
6 numbers associated with the exhibit.

7 THE DEPONENT: I'm -- I'm not sure who  
8 Rob Boyle is, I'm afraid.

9 Q. (By Mr. Loeser) Okay. Do you know who  
10 Shirley Sun is? 07:40:39

11 A. No, I'm not sure who Shirley Sun is  
12 either.

13 Q. How about Drew Lackman?

14 A. I'm not sure who Drew -- Drew Lackman is  
15 either. 07:40:52

16 Q. And what about WS3.h? Do you know what  
17 that is?

18 A. I don't know what W3.h -- WS3.h is  
19 either, I'm afraid, no.

20 Q. Do you know what the escalation referred 07:41:07  
21 to concerns?

22 A. I -- I don't, I'm afraid.

23 (Exhibit 407 was marked for  
24 identification by the court reporter and is  
25 attached hereto.) 07:41:18

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Loeser) Why don't we go to the 07:41:18  
2 deck itself, which is attached.

3 And while we're loading up the next  
4 exhibit, 407, Mr. Cross, I take it you reviewed  
5 that email and the attached deck in advance of your 07:41:33  
6 testimony today?

7 A. I did -- I did review these documents.  
8 You sent over a lot of documents. I did my best,  
9 but there was quite a lot to get through.

10 Q. Oh, I understand. 07:41:48

11 Did you make any effort to contact  
12 Mr. Boyle, Ms. Sun, or Mr. Lackman?

13 A. I did not make efforts to contact them.

14 Q. How about Eddie O'Neil?

15 A. I did not make efforts to contact 07:42:03  
16 Eddie O'Neil after receiving these documents.

17 Q. And I'll try and -- I don't have a lot of  
18 questions about this deck, but I have a few.

19 So if you look at the first slide, it  
20 says "WS3.j escalation process proposal 07:42:15  
21 March 2019."

22 Did I read that correctly?

23 A. You read that correctly. Do you mind if  
24 you -- do you mind if I just take a --

25 Q. Yeah, yeah. 07:42:26

## HIGHLY CONFIDENTIAL

1 A. -- couple minutes to scan through the 07:42:27  
2 deck?

3 MR. LOESER: Let me tell you -- please  
4 review the deck, but let me tell you that  
5 particular pages that I'm -- I'm not going to ask 07:42:39  
6 you a lot about it, but I'm going to ask you about  
7 slide 5, slide 6, slide 14, 17, and 18.

8 THE DEPONENT: Okay. I've had a quick  
9 scan through.

10 Q. (By Mr. Loeser) Okay. Thank you. 07:43:55

11 Let's look at slide 5, which I think will  
12 help you understand the context of this deck.

13 And I'll read the header on the slide.

14 "[REDACTED]

15 [REDACTED] All will either be [REDACTED] 07:44:12

16 [REDACTED]

17 Do you see that?

18 A. I do.

19 Q. And do you know if that occurred?

20 A. My understanding is yes, that did occur. 07:44:23

21 Q. Okay. And the bullet says [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED] to ensure they comply [REDACTED]

25 [REDACTED] 07:44:37

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## HIGHLY CONFIDENTIAL

1 Do you know if that occurred? 07:44:40

2 A. My understanding is yes, that -- that did  
3 occur.

4 Q. And what is the [REDACTED]  
5 [REDACTED] 07:44:47

6 A. I'll -- I'll do my best to describe it.

7 The [REDACTED] is a companywide process by  
8 which any [REDACTED] need  
9 to be reviewed by a number of people from a number  
10 of different teams [REDACTED] 07:45:12

11 [REDACTED]

12 Q. And why was that process implemented?

13 MR. SCHWING: Outside the scope.

14 THE DEPONENT: I -- I'm not sure the full  
15 details of -- of why that process was implemented. 07:45:31  
16 I can talk from my -- my personal understanding,  
17 but I'm not aware of the full set of reasons why --  
18 why that was implemented.

19 Q. (By Mr. Loeser) What are the reasons  
20 that Facebook had for implementing that process? 07:45:48  
21 Any of the reasons?

22 MR. SCHWING: Same objection.

23 Go ahead.

24 THE DEPONENT: So, again, so some of the  
25 reasons I understand that -- that this was 07:45:59

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## HIGHLY CONFIDENTIAL

1 introduced was to ensure that appropriate gating 07:46:01  
2 mechanisms were being used, that the implementation  
3 of the APIs was using Facebook's modern coding  
4 standards, and that there were policies and  
5 procedures documented about the purpose of the API 07:46:24  
6 and who it was made available to.

7 Q. (By Mr. Loeser) And was there a  
8 particular event that prompted Facebook to  
9 undertake these efforts?

10 MR. SCHWING: Outside the scope. 07:46:42

11 THE DEPONENT: Sorry, Austin. Say again.

12 MR. SCHWING: I said outside of the  
13 scope.

14 But -- if you know in your personal  
15 capacity, go ahead. 07:46:50

16 THE WITNESS: Yeah, I'm not sure I can  
17 give -- a companywide answer there. My  
18 understanding is that this happened after the  
19 Cambridge Analytica situation broke and that was  
20 one of the driving reasons. 07:47:03

21 Q. (By Mr. Loeser) And if you go to slide  
22 9. And the header says "Each API is [REDACTED]

23 [REDACTED]

24 Do you see that?

25 A. I do see that. 07:47:20

## HIGHLY CONFIDENTIAL

1 Q. And then can you read the first bullet. 07:47:22

2 A. "The [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 Q. And did that happen? 07:47:34

6 A. My understanding is yes. An exercise was

7 [REDACTED]

8 [REDACTED]

9 Q. Okay. Can you read the next bullet.

10 A. The second bullet is "Everything found to 07:47:50

11 be high risk but high value is being flagged for

12 escalation."

13 Q. And what does Facebook mean by "high risk

14 but high value"?

15 MR. SCHWING: Object to the extent it's 07:48:02

16 outside the scope of topics 6 and 7.

17 THE DEPONENT: I'm -- I'm not confident

18 in -- in -- I don't think I can answer on behalf of

19 the company there. I wasn't involved in this -- in

20 this process, so -- and I haven't seen the -- the 07:48:13

21 documentation or the -- the -- what was used to --

22 to make that determination. So I'm not sure I can

23 answer that, I'm afraid.

24 Q. (By Mr. Loeser) Were there APIs and

25 platform products that emitted friend data that 07:48:30

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## HIGHLY CONFIDENTIAL

1 were considered high risk and high value? 07:48:34

2 A. As I said, I'm not entirely -- I'm not  
3 confident in which APIs specifically were  
4 categorized in each -- in each of these buckets.

5 So I couldn't give you an answer, I'm afraid. 07:48:48

6 Q. So who would at Facebook would know if  
7 there are APIs that emit friend data that are  
8 considered high risk and high value?

9 MR. SCHWING: Object to form.

10 THE DEPONENT: Sorry. The -- the 07:49:02  
11 question there -- the question you asked you had a  
12 tense in it that was present, whereas we're  
13 reviewing a deck here from the past. So sorry.

14 Is your question about today or about  
15 the -- the process being described in this 07:49:16  
16 document?

17 Q. (By Mr. Loeser) Well, let's start with  
18 the process described in this document.

19 A. I would need to understand who was  
20 involved in creating this -- this process and then 07:49:33  
21 speak to them as to like -- how this determination  
22 was made.

23 Q. And how would you find out who was  
24 involved in creating this process?

25 A. I would attempt to ping the -- the -- the 07:49:50

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## HIGHLY CONFIDENTIAL

1 people who -- for whom -- who created this deck and 07:49:58

2 then go from there.

3 Q. We can go to slide 17.

4 Let's go back to the slide right before

5 that, slide 16. 407. 07:50:25

6 It says "Step 1: Roll up APIs into  
7 products."

8 Do you know what that means?

9 A. I -- I can -- again, I can give you -- a  
10 personal answer based on my understanding is that 07:50:40  
11 there was an attempt to identify APIs and which  
12 product organization at the company was responsible  
13 for their existence and maintenance.

14 Q. Now we can go to the next slide.

15 "Step 2: Directors make a [REDACTED] 07:50:59

16 [REDACTED]

17 [REDACTED]

18 That's the header on the slide. Did I  
19 read that correctly?

20 A. You read that correctly, yeah. 07:51:09

21 Q. And did the directors make the [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 MR. SCHWING: Outside the scope.

25 THE DEPONENT: I don't know -- I can't 07:51:29

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## HIGHLY CONFIDENTIAL

1 answer as to what happened as part of this process. 07:51:31

2 I don't have personal experience. So -- so I'm not  
3 sure I'm able to answer that question, I'm afraid.

4 Q. (By Mr. Loeser) You understand that --

5 that Facebook did, in fact, [REDACTED] 07:51:46

6 [REDACTED]

7 [REDACTED] for high value

8 for Facebook and high risk?

9 A. I'm aware that -- my understanding is

10 that Facebook did [REDACTED], but 07:52:00

11 I'm -- I'm not sure exactly what process was

12 followed to determine whether or not [REDACTED]

13 [REDACTED]

14 Q. And if we flip to slide 14. I'll read

15 the header: "Estimates for volumes within each 07:52:24

16 bucket."

17 Do you see that?

18 A. I see that, yeah.

19 Q. And the bullet states "With assessment

20 90 percent done, we have fairly confident estimates 07:52:32

21 for the volume of products that will land in each

22 bucket."

23 Do you see that?

24 A. I see that, yup.

25 Q. And do you see that according to this 07:52:40

## HIGHLY CONFIDENTIAL

1 graphic here, Facebook made the determination to 07:52:42  
2 escalate [REDACTED]  
3 that it considered high value to Facebook and high  
4 risk; is that right?

5 MR. SCHWING: Object to form. Outside 07:52:59  
6 the scope.

7 THE DEPONENT: Sorry. I think this --  
8 this slide suggests an estimate of things which  
9 might be escalated, but I'm not sure that is  
10 reflective of ultimately what was done or the 07:53:13  
11 proportions that were [REDACTED]  
12 [REDACTED]

13 Q. (By Mr. Loeser) And how would you find  
14 the answer to what was actually done?

15 A. I would try and determine who was 07:53:26  
16 involved in this effort and -- and ask them some  
17 more detailed questions.

18 Q. And you would do that by pinging the  
19 author of this deck to start?

20 MR. SCHWING: Outside the scope. 07:53:41

21 THE DEPONENT: So my starting -- my  
22 starting point in trying to determine that would be  
23 to -- to -- to find the author of this deck and  
24 attempt to ask them questions about what was done.

25 Q. (By Mr. Loeser) Okay. Let's go back to 07:53:55

HIGHLY CONFIDENTIAL

1 slide 17. 07:53:57

2 Sorry.

3 And this is the slide that has the header

4 "Directors make the [REDACTED]

5 [REDACTED] correct? 07:54:12

6 A. I see that, yeah.

7 Q. And do you see the bullets on the right

8 side?

9 A. I do.

10 Q. The first bullet is "Each product will be 07:54:20

11 rolled up its closest director," right?

12 A. Yup, I see that.

13 Q. And the next bullet says "We will ask

14 them to make [REDACTED]

15 [REDACTED] and to complete a 07:54:33

16 one-slide template for each explaining why its

17 [REDACTED]."

18 Did I read that correctly?

19 A. You read that correctly.

20 Q. Okay. And then the next bullet states 07:54:48

21 "Each director will have their respective PG lead

22 sign off on their decisions and justification."

23 Did I read that correctly?

24 A. You read that correctly.

25 Q. And did that -- did that occur? 07:54:59

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Outside the scope. Vague. 07:55:07

2 THE DEPONENT: I'm not aware of the -- of  
3 the details of what process was followed and what  
4 was ultimately done, so I'm afraid I -- I can't  
5 answer that question. 07:55:16

6 Q. (By Mr. Loeser) Okay. Let's go to the  
7 next slide.

8 And, Mr. Cross, the slide we just looked  
9 at referred to a one-slide template. And this is  
10 the next page. At the top it says "Example product 07:55:25  
11 template."

12 Do you see that?

13 A. I do see that.

14 Q. And this was -- this was the template  
15 that was designed for -- for the directors to make 07:55:32  
16 a [REDACTED]

17 [REDACTED]  
18 [REDACTED] is that right?

19 MR. SCHWING: Outside the scope.  
20 Object -- object to form. 07:55:52

21 THE DEPONENT: So, yeah, I -- I didn't  
22 write this deck, and I haven't spoken to the  
23 authors of this deck, so I can't confirm that  
24 that's their intention.

25 But it -- it seems to me to be a 07:56:05

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## HIGHLY CONFIDENTIAL

1 reasonable interpretation that this is the 07:56:08  
2 one-slide template -- although the -- it's -- the  
3 slide -- the slide prior links to one-slide  
4 template. It's not clear that that links to the  
5 next slide or links to something else. 07:56:19

6 Q. (By Mr. Loeser) Fair to say, though, if  
7 the prior slide refers to a one-slide template and  
8 this is, in fact, a one-slide template that this is  
9 likely what the prior slide was referring to?

10 MR. SCHWING: Calls for speculation. 07:56:35  
11 Outside the scope.

12 THE DEPONENT: Yeah, I can't confirm  
13 that, but it's not an unreasonable interpretation.

14 Q. (By Mr. Loeser) Did Facebook use this  
15 template? 07:56:44

16 A. I -- I do not know if Facebook used this  
17 template, and -- and anything else would be --  
18 would be speculating, which is inappropriate, I  
19 think.

20 Q. And looking at the template, it provides 07:57:01  
21 a place for the director to fill in certain details  
22 about the APIs and products that that director was  
23 responsible for; is that right?

24 MR. SCHWING: Same objections.

25 THE DEPONENT: What I see on the slide is 07:57:20

## HIGHLY CONFIDENTIAL

1 a range of -- of things. 07:57:21

2 Q. (By Mr. Loeser) Okay. And these things

3 are details that, according to the prior slide,

4 were intended to be used by the director to [REDACTED]

5 [REDACTED], correct? 07:57:33

6 MR. SCHWING: Same objections.

7 THE DEPONENT: So I -- I'm, as I

8 testified previously, not able to confirm that this

9 template was -- was indeed used or for what

10 purpose. 07:57:59

11 So it's -- it's hard for me to answer

12 that question.

13 Q. (By Mr. Loeser) Okay. Well, let's just

14 look at the template and see what information,

15 according to this slide deck, the director was 07:58:06

16 going to provide in order to [REDACTED]

17 [REDACTED]

18 Okay? Is that fair? Can we look at this

19 slide and walk through it?

20 A. I'm happy to review the slide. 07:58:24

21 MR. SCHWING: Calls --

22 THE DEPONENT: Sorry, Austin.

23 MR. SCHWING: Calls for speculation.

24 It's outside the scope.

25 Q. (By Mr. Loeser) So the first, if you 07:58:32

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## HIGHLY CONFIDENTIAL

1 look at the right -- the right column, the first 07:58:33  
2 box there is "sizing"; is that right?  
3 A. That's what's on the slide, yeah.  
4 Q. And the information that falls into that  
5 category, there's three things. 07:58:44  
6 The first is number of users, right?  
7 A. Again, that's what I see on the slide.  
8 Q. And the second is number of businesses?  
9 A. That's what I see on the slide.  
10 Q. And the third is number of apps? 07:58:56  
11 A. That's what I see on the slide.  
12 Q. And so those are three details that the  
13 director would provide to help [REDACTED]  
14 [REDACTED] -- right? --  
15 according to this structure? 07:59:10  
16 MR. SCHWING: Calls for speculation.  
17 It's outside the scope.  
18 THE DEPONENT: I'm not sure who is  
19 intended to -- to fill in this -- this slide or --  
20 or how this information would have been used. 07:59:27  
21 Q. (By Mr. Loeser) Okay. Well, let's go  
22 back to slide 17 for a second.  
23 And you see the second bullet, it says --  
24 and it's referring to directors: "We will ask them  
25 to make a [REDACTED] 07:59:40

HIGHLY CONFIDENTIAL

1 [REDACTED] and to complete a 07:59:42

2 one-slide template [REDACTED]

3 [REDACTED]

4 So based upon this deck, does it appear

5 that the person who was intended by the author of 07:59:52

6 this deck that would complete the template was the

7 director, and the purpose of filling out the

8 template was to [REDACTED]

9 [REDACTED]

10 Isn't that -- isn't that right, 08:00:11

11 Mr. Cross?

12 MR. SCHWING: Same objections.

13 THE DEPONENT: I'm not sure it's -- I

14 don't think you can summarize the directors who

15 were -- expected to fill out this template. 08:00:22

16 Q. (By Mr. Loeser) Well, can you read into

17 the record the second bullet.

18 A. The second bullet is "We will ask them to

19 make a [REDACTED]

20 [REDACTED] and to complete a one-slide 08:00:39

21 template [REDACTED]

22 [REDACTED]

23 Q. What do you interpret that to mean?

24 MR. SCHWING: Same objections.

25 THE DEPONENT: Again, like I don't feel I 08:00:54

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## HIGHLY CONFIDENTIAL

1 can give a -- an accurate company answer onto that. 08:00:56

2 From my experience being involved in these kinds of

3 things in the past, typically an engineering

4 manager or product manager or some other person

5 would be responsible for collecting the 08:01:15

6 information. It's possible that directors would

7 have done that work. I -- I don't know how teams

8 were -- were expected to do this.

9 Q. (By Mr. Loeser) Let's look again at

10 the -- at the next page, and let's assume for the 08:01:33

11 moment this is the one-page template that is

12 referred to on the prior page.

13 We went through sizing. The next

14 category of information says "metrics impact"; is

15 that right? 08:01:45

16 A. That's what I see on the slide.

17 Q. And the first item listed there is MAU;

18 is that right?

19 A. That's what I see on the slide, right.

20 Q. And what is MAU? 08:01:56

21 A. MAU, as I understand it, refers to

22 monthly active users.

23 Q. Okay. And the next is "MSI."

24 What is that?

25 A. My understanding is that that refers to 08:02:05

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## HIGHLY CONFIDENTIAL

1 meaningful social interactions. 08:02:07

2 Q. What is that?

3 A. Meaning social interactions is a -- is a

4 metric used to understand the engagement with

5 content posted to Facebook. 08:02:20

6 Q. And how is it -- is it ranked or scored  
7 somehow or...

8 A. There's a way in which MSI is -- is

9 calculated. I'm not an expert in it, in exactly

10 how it is calculated. 08:02:39

11 Q. Why is it tracked?

12 MR. SCHWING: Outside the scope.

13 THE DEPONENT: I think it's -- it's one

14 of many measures of -- of engagement. It's -- it's

15 one that the company has used previously to -- to 08:02:51

16 understand engagement as -- as a concept.

17 Q. (By Mr. Loeser) The next thing is "MBI."

18 What is that?

19 A. I don't know what MBI stands for.

20 Q. And the next item here is "revenue." 08:03:05

21 What does that stand for?

22 MR. SCHWING: Outside of the scope.

23 THE DEPONENT: Well, I think, again,

24 I'll -- don't want to give a company answer to

25 that, because I don't think it's -- I didn't write 08:03:20

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## HIGHLY CONFIDENTIAL

1 the slides. 08:03:23

2 But in a personal capacity, I don't  
3 "revenue" stands for anything. It just means  
4 revenue.

5 Q. (By Mr. Loeser) Okay. And it says 08:03:27  
6 "revenue attribution."

7 So is the idea here, as for all of these  
8 categories, that this is the revenue that would be  
9 associated with the particular app that had access  
10 to this API? 08:03:38

11 MR. SCHWING: Calls for speculation.  
12 Outside the scope.

13 THE DEPONENT: I'm not sure what was  
14 expected to be put in this slide. It wouldn't be  
15 related to -- to a specific app, no. 08:03:54

16 Q. (By Mr. Loeser) What would it be related  
17 to?

18 MR. SCHWING: Same objections.

19 THE DEPONENT: Again, I don't know what  
20 it would be related to. There's no detail here of 08:04:03  
21 exactly what is expected in terms of attribution.  
22 I would expect that would differ greatly based on  
23 the API being assessed.

24 Q. (By Mr. Loeser) So can you tell me how  
25 Facebook defines "revenue" for purposes of 08:04:20

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## HIGHLY CONFIDENTIAL

1 completing this template? 08:04:25

2 A. I can't explain what "revenue" means

3 in -- in this context. I think that the -- the ask

4 here is -- is not documented, and I would be

5 speculating by -- by trying to -- trying to explain 08:04:44

6 what -- what "revenue attribution" means.

7 Q. And the next line here says "risk."

8 Do you see that?

9 A. I do see that.

10 Q. And following down that row, it says "[REDACTED]" 08:04:58

11 [REDACTED]

12 Do you see that?

13 A. I do.

14 Q. What do you take that to mean? How does

15 that relate to risk? 08:05:12

16 MR. SCHWING: Compound. Vague. Outside

17 the scope.

18 THE DEPONENT: So, again, in terms of

19 a -- I don't think I can give a company answer here

20 because I wasn't involved in writing this deck and 08:05:20

21 haven't spoken to its authors.

22 In -- my understanding is that it would

23 be a determination of whether or not the -- [REDACTED]

24 [REDACTED] defined

25 in some way which I have -- I have not -- have not 08:05:37

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## HIGHLY CONFIDENTIAL

1 seen and is not defined specifically in this deck. 08:05:41

2 Q. (By Mr. Loeser) And does Facebook  
3 consider APIs that emit PII as being more risky  
4 than those that don't?

5 MR. SCHWING: Vague. Outside the scope. 08:05:54

6 THE DEPONENT: I don't think -- I  
7 can't -- again, can't give an answer on behalf of  
8 the Facebook here. I think they're -- again,  
9 giving you my -- my take from a personal  
10 perspective here, APIs that emit PII are certainly 08:06:10  
11 worthy of -- of being rigorously understood. But  
12 there are also other APIs that -- that maybe don't  
13 emit PII that would also be considered risky. So I  
14 don't think it's just PII.

15 Q. (By Mr. Loeser) You see the next item on 08:06:35  
16 this template here, "Strategic Value"?

17 A. I do see that.

18 Q. And how does Facebook define "strategic  
19 value" for purposes of deciding whether to continue  
20 allowing access to private APIs? 08:06:51

21 MR. SCHWING: Outside the scope. Object  
22 to form.

23 THE DEPONENT: So as I said, I didn't  
24 write this slide deck and haven't spoken to its  
25 authors, so I can't understand what they were 08:07:06

## HIGHLY CONFIDENTIAL

1 referring to by this. And I think as -- as we 08:07:08  
2 discussed previously, there's no universal  
3 understanding of what "strategic value" means, and  
4 it likely differs between product group across the  
5 company. 08:07:26

6 So I don't think there's a standard  
7 definition I'm aware of that I could cite now.

8 Q. (By Mr. Loeser) So you recall from this  
9 deck that the -- the template was intended to

10 [REDACTED] 08:07:41

11 [REDACTED] is that right?

12 MR. SCHWING: Object to form. Misstates  
13 testimony. Outside the scope.

14 THE DEPONENT: So can you ask the  
15 question again to make sure I understand what 08:08:00  
16 you're asking.

17 Q. (By Mr. Loeser) Yes.

18 So you recall from this deck that the  
19 template was intended to [REDACTED]

20 [REDACTED] 08:08:07

21 [REDACTED] is that right?

22 MR. SCHWING: Same objections.

23 THE DEPONENT: Again, my understanding is  
24 that from -- from reading this is that this was  
25 designed to capture information to help inform a 08:08:21

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## HIGHLY CONFIDENTIAL

1 decision. 08:08:26

2 Q. (By Mr. Loeser) And so in connection

3 with the deciding [REDACTED]

4 [REDACTED] Facebook identified whether

5 there was a strategic value associated with the API 08:08:36

6 or product, right?

7 MR. SCHWING: Same objections.

8 THE DEPONENT: I -- I don't know how

9 these decisions were -- were made. And we're

10 looking at a sample template here that -- that may 08:08:50

11 have been filled in in a bunch of different ways.

12 So I -- I couldn't -- I don't feel I could answer

13 on how this information was used.

14 Q. (By Mr. Loeser) Who at Facebook would be

15 able to answer that question? 08:09:13

16 MR. SCHWING: Calls for speculation.

17 If you know, go ahead and answer.

18 THE DEPONENT: Yeah, I -- I don't know

19 who at Facebook would -- would be able to answer

20 that question. 08:09:25

21 Q. (By Mr. Loeser) This assessment that is

22 discussed in this deck assessed APIs that emitted

23 friend data, among other APIs; is that right?

24 A. I'm not -- I'm not sure exactly which --

25 what this -- what this covered. So, again, I -- I 08:09:58

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## HIGHLY CONFIDENTIAL

1 can't confirm which APIs were covered by this. 08:10:03

2 Oh, yeah. If this covers all APIs in  
3 platform products, again, that's what it says in  
4 this slide. But, again, I don't know exactly what  
5 was -- what was covered by this -- by the process 08:10:17  
6 articulated in this deck.

7 Q. And based upon this process articulated  
8 in the deck, was the result a decision to whitelist  
9 APIs or -- or products?

10 A. Sorry. Can you ask the question again. 08:10:56  
11 I'm not sure I understood.

12 Q. Sure.

13 This deck describes a process that  
14 involves a one-page template that provides details  
15 about a product or API that's provided by the 08:11:04  
16 director associated with that product or API, and  
17 the template was then [REDACTED]  
18 [REDACTED]; is that  
19 right?

20 MR. SCHWING: Lacks foundation. Outside 08:11:22  
21 the scope.

22 THE DEPONENT: I'm not -- again, I'm not  
23 confident in this -- I'm not expert in -- in -- in  
24 this process or how it was followed or the  
25 decisions that were taken as a result of this 08:11:36

## HIGHLY CONFIDENTIAL

1 process. 08:11:38

2 Q. (By Mr. Loeser) Okay. Based upon your  
3 preparation for your testimony today, can you tell  
4 me whether for products or APIs that Facebook  
5 decided to retain through this process, would that 08:11:51  
6 result in a whitelist for that product or API?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: It -- I -- I don't know  
9 whether or not -- what -- what the result of this  
10 process would have been and what the -- the 08:12:12  
11 specifics as to what happened next likely depended  
12 on a number of factors that I -- that I'd be  
13 speculating about. So it's hard -- hard to give an  
14 answer.

15 I don't know exactly what happened in 08:12:26  
16 these decisions and what the resulting results  
17 were.

18 Q. (By Mr. Loeser) Who at Facebook would  
19 know whether the result of this process was a  
20 whitelisting decision? 08:12:38

21 A. I don't know who at Facebook would --  
22 would -- would know the answer to that question.

23 Q. If you go to the next exhibit.

24 MR. LOESER: We're going to pull up the  
25 next exhibit. Exhibit 29. 08:13:12

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Loeser) Mr. Cross, I'm showing 08:13:45  
2 you what's been previously marked as Exhibit 29,  
3 which is an email from Jackie Rooney to the  
4 management team dated March 22nd, 2018.

5 Do you see that? 08:14:03

6 A. I see that.

7 Q. And the "to" says "M Team."

8 Is that the management team?

9 A. Yes, that would be Facebook's executive  
10 management team. 08:14:11

11 Q. And you see the subject is "Q&A briefing  
12 for March 23, 2018"?

13 A. I see that, yeah.

14 Q. And are Q&A briefings something that  
15 happened regularly at Facebook? 08:14:29

16 A. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

20 Q. Mr. Cross, take a minute and -- and 08:14:44  
21 review this -- this email, if you would.

22 A. I will do. Thank you.

23 MR. SCHWING: Mr. Loeser, is this a  
24 document that you provided us notice with in  
25 advance of this depo? 08:15:35

## HIGHLY CONFIDENTIAL

1 MR. LOESER: Yes. We can double-check 08:15:36  
2 right now.

3 THE DEPONENT: Okay. Yes, I have  
4 reviewed the document.

5 Q. (By Mr. Loeser) Now, this Q&A briefing 08:16:07  
6 discusses the Cambridge Analytica events; is that  
7 right?

8 A. I see Cambridge Analytica mentioned a  
9 couple of times or -- or once in the document.

10 Q. Do you recall other Q&A briefings in 08:16:22  
11 which Cambridge Analytica was discussed?

12 MR. SCHWING: I'm going to state for the  
13 record that I don't believe that this was noticed  
14 as a document that we were going to be providing  
15 testimony on today. 08:16:33

16 So, Mr. Cross, it may have been provided  
17 earlier.

18 I just want to make sure Mr. Cross has  
19 the opportunity to -- to take a look at it.

20 MR. LOESER: Well, yeah. It was 08:16:47  
21 provided. I don't know if it was provided for  
22 today. There was a subset of documents --

23 MR. SCHWING: Yeah.

24 MR. LOESER: -- it wasn't.

25 MR. SCHWING: I think Mr. Melamed 08:16:55

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## HIGHLY CONFIDENTIAL

1 indicated -- and I don't want to take much time on 08:16:56  
2 this -- indicated that the only documents we needed  
3 to be ready on were the ones that he identified in  
4 his email.

5 So, Mr. Cross, it's -- I'll allow the 08:17:03  
6 questioning on it.

7 I just want to make sure Mr. Cross has an  
8 opportunity to review it, since it wasn't  
9 identified.

10 So, Mr. Cross, just let us know when 08:17:12  
11 you're ready and we'll continue.

12 MR. LOESER: And for the record,  
13 Mr. Melamed identified the documents that were  
14 subject to the notices for which he was  
15 responsible. We previously provided Mr. Cross with 08:17:20  
16 a series of documents for his examination, and this  
17 was included.

18 MR. SCHWING: Okay. Well, I don't want  
19 to take up too much time here.

20 We also received notice with respect to 6 08:17:30  
21 and 7. There's no problem with asking questions  
22 about it. It's fine. We'll just --

23 Go ahead and take your time, Mr. Cross,  
24 to look at it, and then when you're ready, just let  
25 us know. 08:17:41

HIGHLY CONFIDENTIAL

1 THE DEPONENT: Yeah. Please -- please 08:17:48  
2 ask your questions, Mr. Loeser.

3 Q. (By Mr. Loeser) Sure. If we go down  
4 this briefing to the heading "Suggested Guidance."

5 Do you see that? 08:17:57

6 A. I do see that.

7 Q. And it says "Q1: What is the message we  
8 would like to send out from employees to their  
9 friends and family [REDACTED]  
10 [REDACTED] 08:18:12

11 Do you see that?

12 A. I see that.

13 Q. And can you read the second bullet.

14 A. The second bullet is [REDACTED]  
15 [REDACTED] 08:18:29  
16 [REDACTED]  
17 [REDACTED]

18 Q. Okay. And can you read the next bullet  
19 as well.

20 A. [REDACTED] 08:18:39  
21 [REDACTED]  
22 [REDACTED]  
23 [REDACTED]

24 Q. And what are the [REDACTED] being referred  
25 to here? 08:18:54

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to the form. 08:18:57

2 Outside the scope.

3 THE DEPONENT: I couldn't comment on --

4 I'm not sure I -- I can comment on what -- what

5 this is referring to from a company's perspective. 08:19:07

6 I haven't -- I haven't prepared -- it's not

7 something I'm an expert on in terms of -- the comms

8 work around this at the time.

9 Q. (By Mr. Loeser) Well, Mr. Cross, I'm

10 asking you as Facebook's 30(b)(6) designee what 08:19:23

11 Facebook means by "[REDACTED]" in this context.

12 Are you prepared to answer that question?

13 A. No, I'm not sure --

14 MR. SCHWING: Objection.

15 THE DEPONENT: Sorry. 08:19:34

16 MR. SCHWING: Outside the scope of topics

17 6 and 7.

18 Q. (By Mr. Loeser) Mr. Cross, did the

19 [REDACTED]

20 [REDACTED] 08:19:44

21 A. I'm -- I'm not sure, again, I can comment

22 on what -- what is meant here by the term

23 [REDACTED]

24 Q. And, Mr. Cross, did the [REDACTED]

25 [REDACTED] 08:20:00

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## HIGHLY CONFIDENTIAL

1 [REDACTED] 08:20:03

2 [REDACTED]

3 A. I don't think I can comment on what --

4 what's being referred to by -- by the word

5 "[REDACTED] here. 08:20:11

6 Q. So who at Facebook can provide the answer

7 to the questions I just asked?

8 MR. SCHWING: Calls for speculation.

9 THE DEPONENT: Yeah, I -- I couldn't give

10 you the name -- like a name of somebody that -- 08:20:25

11 that would be able to answer that question.

12 Q. (By Mr. Loeser) Does Facebook believe

13 that telling users that apps would no longer be

14 able to obtain friend data while continuing to

15 allow a number of apps to do just that was a 08:20:39

16 mistake?

17 MR. SCHWING: Object to form.

18 THE DEPONENT: Yeah, I don't feel I can

19 comment on the -- the terminology [REDACTED] and what

20 Facebook meant by it. It's not something I'm an 08:20:56

21 expert in, I'm afraid.

22 Q. (By Mr. Loeser) Are you prepared to

23 answer that question today, Mr. Cross?

24 MR. SCHWING: Object to form.

25 THE DEPONENT: I don't -- I don't feel 08:21:05

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1 I'm able to answer that question on behalf of the 08:21:07  
2 company, no.

3 Q. (By Mr. Loeser) Does Facebook believe it  
4 was a breach of user trust to tell users that apps  
5 would no longer be able to obtain friend data while 08:21:14  
6 continuing to allow a number of apps to do just  
7 that?

8 MR. SCHWING: Object to form. Outside  
9 the scope.

10 THE DEPONENT: Again, I'm not an expert 08:21:25  
11 in what is meant by the phrase "[REDACTED] here or  
12 what the company is referring to and -- and  
13 specifically what -- what is meant by that phrase.  
14 So I'm afraid I don't feel I can answer that  
15 question on behalf of the company. 08:21:40

16 Q. (By Mr. Loeser) Mr. Cross, what is the  
17 [REDACTED] referred to in this employee  
18 communications sent by the management team?

19 MR. SCHWING: Same objections.

20 THE DEPONENT: I don't feel I can comment 08:22:02  
21 on -- on what's meant by [REDACTED] here on  
22 behalf of the company. That's a -- that's a --  
23 that's a term I like -- that could mean several  
24 things that I -- I don't feel prepared to -- to  
25 opine on. 08:22:21

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Loeser) And, Mr. Cross, what 08:22:24  
2 does -- what does Facebook believe [REDACTED]  
3 [REDACTED] means in this context?

4 MR. SCHWING: Outside of the scope of the  
5 witness. Object to form. 08:22:34

6 THE DEPONENT: Again, this -- the framing  
7 here is not something I'm an expert in, and so I  
8 don't feel I can answer on behalf of the company.

9 Q. (By Mr. Loeser) Mr. Cross, what is  
10 Facebook's position on whether there was a [REDACTED] 08:22:50  
11 [REDACTED]

12 MR. SCHWING: Object to form. Outside  
13 the scope.

14 THE DEPONENT: So, again, I don't think  
15 I -- I -- this -- the communications here and 08:23:03  
16 the -- the terminology here is not something I'm --  
17 I'm an expert in. And I -- I don't feel prepared  
18 to -- I don't feel I'm able to give an answer on  
19 behalf of the company there.

20 Q. (By Mr. Loeser) Mr. Cross, what is 08:23:20  
21 Facebook's position on whether mistakes were made  
22 by Facebook in connection with the deprecation of  
23 friend data?

24 MR. SCHWING: Object to the scope.  
25 Outside the scope. Object to form. 08:23:34

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## HIGHLY CONFIDENTIAL

1 THE DEPONENT: So, again, I don't -- I 08:23:41  
2 don't feel like -- like I don't feel this an area  
3 of expertise of mine, and therefore I -- I don't  
4 feel able to provide an answer on behalf of the  
5 company as to specifically what's meant by that -- 08:23:51  
6 by that phrase.

7 Q. (By Mr. Loeser) Mr. Cross, we're going  
8 to introduce as an exhibit interrogatory responses  
9 by Facebook.

10 MR. LOESER: And for the record, this is 08:24:11  
11 Defendant Facebook, Inc.'s second amended responses  
12 and objections to plaintiff's fourth set of  
13 interrogatories.

14 It's a long document, and I'm only going  
15 to ask you questions about specific pages, so 08:24:26  
16 there's -- we don't spend a lot of time reviewing  
17 the 460 pages that are about to become an exhibit.

18 MR. SCHWING: Derek, what's the -- is  
19 there an exhibit number for this one?

20 MR. LOESER: Yes. It's Exhibit 128, and 08:25:09  
21 the date of the verification for the responses is  
22 February 11th, 2021. These were verified by Steven  
23 Elia and also by the person we've been referring to  
24 as KP.

25 Q. (By Mr. Loeser) Mr. Cross, your notes 08:25:33

## HIGHLY CONFIDENTIAL

1 that you produced following the first day of your 08:25:34  
2 testimony referred to Facebook's interrogatories  
3 responses.

4 Do you recall that?

5 A. I don't recall that. Let me -- let me 08:25:52  
6 review. Can you point to the thing that you're  
7 referencing there?

8 Q. In your notes?

9 A. Yeah.

10 Q. I can. I will have to take a moment to 08:26:17  
11 go find the notes, but -- but I can do that as  
12 well. Bear with us.

13 While we're looking for that, have you  
14 reviewed these signed interrogatories responses  
15 previously, Mr. Cross? 08:26:46

16 A. I have -- I have -- I have seen this  
17 document before, but it's extremely long. I've --  
18 I've looked at some parts of it. I couldn't say  
19 I've read every word.

20 Q. And did you have any role in -- in 08:26:59  
21 providing these responses?

22 A. No, I do not recall having any -- any  
23 role in -- in providing these responses.

24 MR. LOESER: We put your Exhibit 335 up.

25 THE DEPONENT: Thank you. 08:27:18

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## HIGHLY CONFIDENTIAL

1 MR. LOESER: In reference to your -- 08:27:18

2 Q. (By Mr. Loeser) Okay. Under "Other  
3 Capabilities" at the end of the page, there is a  
4 quotation: "The vast majority of capabilities that  
5 allowed access to private APIs did not enable  
6 third-party apps to access user data."

08:27:29

7 That -- that is a statement made in  
8 interrogatories. Is that where you obtained the  
9 statement?

10 A. I -- I couldn't confirm where I pulled 08:27:43  
11 that statement from. It's their -- it's their  
12 attribution. If it's -- if it's in the  
13 interrogatory responses, it's possible -- it's  
14 likely that that's -- that's where I took it from,  
15 but I couldn't be 100 percent certain. 08:27:57

16 Q. Okay. Thank you for that.

17 We can go to page 63 of the interrogatory  
18 responses.

19 And this is -- the numbering Facebook  
20 used is a little odd. This says "Response No. 77." 08:28:16  
21 However, if you go back to page 60, this is  
22 Facebook's response to interrogatory No. 14. I'm  
23 just saying that for the record.

24 So we're back on Exhibit 128. We're  
25 looking at Facebook's response to interrogatory 08:28:34

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1 No. 14, which starts on page 60. And on page 63, 08:28:36  
2 under the heading "Response No. 77," Facebook  
3 provides a definition for "integration partner."

4 So if you could look at the paragraph  
5 under Response No. 77, and I'll read what matters, 08:29:03  
6 and then we can look at some more specific  
7 responses here.

8 Facebook writes "'Business partners' is  
9 not a term of art used within Facebook used to  
10 describe third parties to whom Facebook outsourced 08:29:18  
11 the time, labor, and money required to build  
12 Facebook's platform from different devices and  
13 operating systems pursuant to integration  
14 partnerships.

15 "To avoid confusion, Facebook will refer 08:29:31  
16 to these entities as 'integration partners.'  
17 Facebook's integration partners are companies  
18 Facebook engaged to build integrations for a  
19 variety of devices, operating systems, and other  
20 products where Facebook and its partners wanted to 08:29:45  
21 offer people a way to receive Facebook or Facebook  
22 experiences. These integrations were built by  
23 Facebook partners for Facebook users that are  
24 approved by Facebook, and they included."

25 Did I read that accurately? 08:29:58

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## HIGHLY CONFIDENTIAL

1 A. I think you read that accurately. 08:30:00

2 Q. Okay. And there are --

3 MR. SCHWING: I'm sorry, Mr. Loeser.

4 Just this is another document that wasn't

5 identified for this session. 08:30:07

6 So, Mr. Cross, I know it's a long

7 document. You certainly don't need to look at the

8 whole thing. But I think it's appropriate for you

9 to take a look at it and make sure for -- you're

10 ready to testify on it. 08:30:20

11 You know, let's not take too long, but do

12 please take a look and then can you answer

13 questions about it.

14 MR. LOESER: Why don't we go off the

15 record for a second. 08:30:34

16 MR. SCHWING: Okay.

17 THE VIDEOGRAPHER: Okay. Off the record.

18 It's 8:48 p.m.

19 (Recess taken.)

20 THE VIDEOGRAPHER: We're back on the 08:45:55

21 record. It's 9:04 p.m.

22 (Discussion off the stenographic record.)

23 Q. (By Mr. Loeser) Okay. So back on the

24 interrogatory responses and looking at page 63, and

25 Facebook has defined "integration partners" in this 08:47:11

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## HIGHLY CONFIDENTIAL

1 response, and it gives four examples of integration 08:47:14  
2 partners that are reflected in the bullets on this  
3 page and the following pages.

4 And those four examples are

5 [REDACTED] 08:47:23

6 [REDACTED]

7 Are there other types of integration  
8 partners at Facebook?

9 MR. SCHWING: Outside the scope.

10 THE DEPONENT: I'm not sure if -- I'm not 08:47:45  
11 if there -- if there are other things that may have  
12 been called "integration partners" at various  
13 times. So I'm -- I'm not -- I'm not sure, I'm  
14 afraid.

15 Q. (By Mr. Loeser) Is -- does Facebook have 08:48:01  
16 the -- what does Facebook mean by "integration  
17 partner"?

18 MR. SCHWING: Outside the scope.

19 THE DEPONENT: So I'm -- "integration  
20 partners" is defined here. But I think -- I'm not 08:48:20  
21 able to give a definition beyond what's in this --  
22 in this document.

23 Q. (By Mr. Loeser) Okay. Are there any  
24 other types of partner that you consider or that --  
25 strike that. 08:48:35

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## HIGHLY CONFIDENTIAL

1 Are there any types of partners that 08:48:35  
2 Facebook considers an integration partner other  
3 than what's listed in this interrogatory response?

4 MR. SCHWING: Object to the form.

5 Outside the scope. 08:48:46

6 THE DEPONENT: So I think it -- in terms  
7 of like Facebook's definition of it, I think it's  
8 hard -- hard for me to give anything. I don't feel  
9 I'm able to give anything beyond -- beyond what's  
10 in this document. 08:49:01

11 What I can say, though, more generally is  
12 you -- at various times, any integration -- an app  
13 that uses the Facebook developer platform could be  
14 termed an integration, and there were entities that  
15 would be referred to as -- as -- as partners that 08:49:19  
16 had integrations that might not meet the -- the  
17 definition "integration partners" as per this --  
18 this document.

19 So it's just -- just in terminology used,  
20 I think there is a way to interpret that more 08:49:37  
21 broadly.

22 Q. (By Mr. Loeser) Okay. So what types of  
23 partners would you add to this list if you were to  
24 include those that we just mentioned?

25 MR. SCHWING: It's outside the scope. 08:49:54

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## HIGHLY CONFIDENTIAL

1 It's vague. 08:49:55

2 THE DEPONENT: Yeah, I wouldn't -- I

3 don't think I can give a -- a Facebook

4 determination of -- of a company like determination

5 of -- of an answer to that question. 08:50:06

6 But, again, kind of a personal

7 perspective with my experience working on this

8 stuff, I might -- I might have used the phrase

9 "integration partner" or "partner integration" or

10 "partner" or "integration" to at times refer to 08:50:25

11 other applications that were integrated with

12 Facebook that weren't on this -- on this definition

13 list.

14 Q. (By Mr. Loeser) Is every integration

15 partner under contract with Facebook? 08:50:46

16 A. When you say --

17 MR. SCHWING: Yeah, sorry.

18 Objection. It's vague. Outside the

19 scope.

20 THE DEPONENT: When you say "integration 08:50:57

21 partner," do you mean integration partners as -- as

22 defined in this document?

23 Q. (By Mr. Loeser) I mean integration

24 partners as that term is used by Facebook.

25 MR. SCHWING: Objection. 08:51:13

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## HIGHLY CONFIDENTIAL

1 THE DEPONENT: Yeah, no -- 08:51:14

2 MR. SCHWING: Vague and outside the  
3 scope.

4 Mr. Cross, I know this is challenging.

5 It's also getting late in the day for you. But 08:51:17

6 just give me a second to -- to state an objection.  
7 Thank you.

8 THE DEPONENT: Of course. My apologies.

9 I -- I don't know whether or not every --  
10 every entity determined here as integration 08:51:34

11 partners has a contract with Facebook, I'm afraid.

12 Q. (By Mr. Loeser) Let's go to the next --  
13 if you go to page 65, you'll see that -- I'll start  
14 at the bottom of page 64.

15 Facebook writes "Below is a list of 08:51:51

16 Facebook's integration partners during the relevant

17 time period asserted by plaintiffs. For

18 information related to the period during which each

19 integration partner was active, Facebook directs

20 plaintiffs to Facebook's responses to Interrogatory 08:52:05

21 No. 15. The lack of an access revocation date does

22 not signify that such access was never revoked or

23 otherwise terminated."

24 Do you see that language?

25 A. I see that, yeah. 08:52:19

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## HIGHLY CONFIDENTIAL

1 Q. And then do you see over pages 65 and 66 08:52:20  
2 and 67 a list of entities that Facebook has  
3 identified as integration partners?

4 A. I see that list of entities that Facebook  
5 has identified as integration partners in this 08:52:37  
6 document, yes.

7 Q. Okay. And just is -- as Facebook's  
8 corporate designee, can you tell me whether this  
9 list is a complete list of all of Facebook's  
10 integration partners? 08:52:50

11 MR. SCHWING: Outside of the scope.

12 THE DEPONENT: I can't comment on  
13 what's -- what's beyond what's in this document. I  
14 think this defines "integration partners" a certain  
15 way and then -- and then gives a list, and I don't 08:53:08  
16 think I have anything I can add beyond that.

17 Q. (By Mr. Loeser) Did all of these  
18 integration partners have access to friend data  
19 through private APIs?

20 A. I don't know if all of these entities had 08:53:28  
21 access to -- to friends data through private APIs.

22 Q. Facebook knows the answer to that  
23 question, right?

24 A. I -- I'm not sure if Facebook knows  
25 whether or not each of these had access to friend 08:53:52

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## HIGHLY CONFIDENTIAL

1 data. It's -- it's possible Facebook knows, but 08:53:55  
2 I -- I'm not sure of how -- of giving sort of an  
3 answer to that question.

4 Q. Okay. Let's look at page 68, which has  
5 Interrogatory No. 15. 08:54:14

6 And you'll see that on page 72 -- again  
7 you'll have to -- I'll represent to you that  
8 despite the numbering on page 72 which says  
9 Response No. 78, this is Facebook's response to  
10 Interrogatory No. 15. And I'll read the first 08:54:43  
11 paragraph here and then I have a few questions to  
12 ask you.

13 This states: "With regard to the APIs  
14 Facebook's integration partners had access to,  
15 Facebook has provided a table identifying by 08:54:59  
16 integration partner the APIs that may have allowed  
17 each integration partner to query (but were not  
18 necessarily -- but would not have necessarily  
19 returned) endpoints associated with users friends'  
20 data fields during the relevant time period, their 08:55:18  
21 associated apps, the date ranges during which they  
22 were active, and the data fields associated with  
23 the APIs they had access to."

24 Did I read that correctly?

25 A. You read that correctly. 08:55:30

## HIGHLY CONFIDENTIAL

1 Q. Now, where this says that the APIs that 08:55:34  
2 may have allowed each integration partner to query,  
3 but would not have necessarily returned  
4 endpoints --

5 Do you see that? 08:55:45

6 A. I see that language.

7 Q. Does Facebook have information on whether  
8 particular data fields available to apps were  
9 actually accessed or collected by apps?

10 MR. SCHWING: Objection. Vague. 08:55:58

11 THE DEPONENT: Can you help me understand  
12 the -- the time period you're referring to here?

13 Q. (By Mr. Loeser) Let's talk about the  
14 time period 2015 to the present.

15 A. So my understanding is that today, 08:56:16

16 [REDACTED]  
17 [REDACTED]  
18 system came into existence in around 2020. Prior  
19 to that, Facebook had an [REDACTED]

20 [REDACTED] 08:56:48

21 [REDACTED]  
22 [REDACTED]  
23 [REDACTED]

24 Q. And as to the -- [REDACTED]

25 [REDACTED] 08:57:11

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1 [REDACTED] 08:57:12

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED] 08:57:32

6 A. Yes, there were mechanisms in place to --

7 [REDACTED]. But

8 exactly what was [REDACTED]

9 [REDACTED] is -- is -- is complicated to

10 explain and -- and not something I can fully 08:57:53

11 explain.

12 Q. And is it your understanding that the

13 [REDACTED] previously?

14 MR. SCHWING: Objection. Vague.

15 THE DEPONENT: When you say "previously," 08:58:10

16 do you mean before 2020?

17 Q. (By Mr. Loeser) Right.

18 A. I -- the -- the -- my point is around

19 the -- the retention time window. So my

20 understanding is [REDACTED] -- 08:58:28

21 [REDACTED]

22 [REDACTED]

23 Q. And do you have a general understanding

24 of the time -- what was Facebook's retention policy

25 for that information? 08:58:48

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1 MR. SCHWING: Outside the scope. 08:58:52

2 THE DEPONENT: I don't know what

3 Facebook's retention policy was for -- for that

4 information. There were various ways in which that

5 information was -- was stored and aggregated and 08:59:04

6 retain over time.

7 Q. (By Mr. Loeser) And you said that the --

8 what [REDACTED]

9 [REDACTED] [REDACTED]

10 MR. SCHWING: Object to form. 08:59:21

11 THE DEPONENT: My understanding is there

12 were mechanisms in place that could be used to

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] 08:59:41

16 [REDACTED] that -- that that

17 would entail.

18 Q. (By Mr. Loeser) And were there instances

19 in which that was [REDACTED]

20 [REDACTED] 08:59:55

21 A. I don't know whether or not that

22 [REDACTED]

23 [REDACTED] I'm -- I'm not aware of the

24 specifics.

25 Q. And who would you ask to answer that 09:00:10

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1 question? 09:00:11

2 A. I would attempt to speak to someone on  
3 the platform engineering team to -- to determine if  
4 there is -- was such a facility and if there are  
5 records of when it was used. 09:00:27

6 Q. You used the expression "source of truth"  
7 before. Is there a person who would be the source  
8 of truth for that information.

9 MR. SCHWING: Calls for speculation.

10 THE DEPONENT: Excuse me. 09:00:41

11 There's likely no one person that's the  
12 source of truth. There are people that have  
13 knowledge of how these systems worked who might be  
14 able to shed light on it. So I think that's -- the  
15 best we'd have. 09:01:00

16 Q. (By Mr. Loeser) Okay. Now, post 2020,  
17 you testified that [REDACTED]

[REDACTED]

[REDACTED] is that right?

20 A. That's my understanding -- 09:01:14

21 MR. SCHWING: Hold on --

22 THE DEPONENT: I keep doing that. Sorry,  
23 Austin. You go.

24 MR. SCHWING: I think it misstates his  
25 testimony -- well, it may mistake his testimony. 09:01:23

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1                   If you could ask that question again just                   09:01:25  
2                   to make sure it's clear, that would be very  
3                   helpful, I think.

4                   MR. LOESER: I'll just ask another  
5                   question.                   09:01:33

6                   Q.     (By Mr. Loeser) So for those -- so post  
7                   2020, there are apps that -- I'm sorry. There are  
8                   APIs that emit some friend data; is that right?

9                   A.     I don't -- I can't comment on which APIs  
10                  exist post 2020 and the information that's emitted.           09:01:54

11                  Q.     Facebook knows whether there are APIs  
12                  post 2020 that emit friend data?

13                  A.     My understanding is that --  
14                  Can you help me understand what you mean  
15                  by "friend data"?                   09:02:10

16                  Q.     Data about users' friends.

17                  A.     When you say "data about users' friends,"  
18                  could you -- could you be more specific?

19                  Q.     I feel like we've had this conversation.  
20                  But I'm asking about Facebook's understanding of           09:02:27  
21                  the term "friend data," which is used repeatedly  
22                  and extensively throughout Facebook's records.

23                  And I'm simply asking you in the system  
24                  that became operative in 2020 if Facebook can  
25                  identify those APIs that emit friend data, using           09:02:44

HIGHLY CONFIDENTIAL

1 Facebook's definition of "friend data." 09:02:50

2 MR. SCHWING: Object to form.

3 THE DEPONENT: My understanding is there

4 is a [REDACTED]

5 [REDACTED] 09:03:04

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 MR. LOESER: Flip forward many pages in  
10 these interrogatories to page 355. And you'll see 09:03:25

11 that Interrogatory No. 27 is -- asks Facebook to

12 "identify by name and time period all third parties

13 to whom Facebook granted whitelisted access, the

14 time period of the grant of whitelisted access, and

15 the third parties for which such access was 09:03:54

16 granted."

17 Do you see that?

18 A. Yeah. Can you just give me a few minutes  
19 to read around this -- this area.

20 Q. Sure. 09:04:03

21 A. Okay. Sorry.

22 Do you -- do you have a question?

23 (Discussion off the stenographic record.)

24 Q. (By Mr. Loeser) So I'm referring you to

25 page -- the page we're looking at, 358. I'm going 09:05:39

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HIGHLY CONFIDENTIAL

1 to read the first paragraph. The first -- second 09:05:43  
2 paragraph below response No. 87.

3 Facebook indicates "The first list below  
4 consists of apps that requested and were given  
5 permission by the app user to access friend 09:05:55  
6 permissions at some point during the app's  
7 existence and were given a one-time extension  
8 allowing them to continue to access the field  
9 available through Graph API v1 (potentially  
10 including friend data) after the deprecation of 09:06:10  
11 Graph API v1 in May 2015. | [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

15 Do you see that? 09:06:23

16 A. I see that.

17 Q. So Graph API version 1 was deprecated in  
18 May of 2015; is that right?

19 A. Facebook began removing access to Graph  
20 AP v1 for applications beginning in April 2015, and 09:06:41  
21 that process continued for -- for most applications  
22 into -- into May 2015, as I -- as I understand it,  
23 yes.

24 Q. And so if an extension went past  
25 December 2015, the extension must have been for 09:07:00

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## HIGHLY CONFIDENTIAL

1 more than six months after Graph API version 1 was 09:07:03  
2 implemented, right?

3 A. Sorry. Can you say that again.

4 Q. Sure.

5 You just indicated that the -- the 09:07:15  
6 deprecation occurred in May of 2015. That's when  
7 that process was completed.

8 This answer indicates that extensions  
9 were for less than six months with one exception,  
10 and I'm just trying to understand the timeline. 09:07:29

11 So if you go to December of 2015, that's  
12 more than six months after May of 2015; is that  
13 right?

14 A. December is -- December 2015 is more than  
15 six months after May 2015, yes. 09:07:43

16 Q. Okay. So any extension that lasted past  
17 December of '15 must have been more than six  
18 months, right?

19 A. I think -- I think that -- that's true,  
20 yes. 09:08:01

21 Q. Let's take a look at -- if you will note  
22 that starting on page 360 is the list referred to  
23 in the paragraph I just read, and it's many, many  
24 pages. But I'll just have you pick any page,  
25 frankly. Let's take this page. 09:08:19

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## HIGHLY CONFIDENTIAL

1                   And if you look at the headers across the                   09:08:21  
2                   top, there's -- there's a column for "Entity."  
3                   Do you see that?  
4           A.     I see that.  
5           Q.     And then "app name."                   09:08:33  
6                   Do you see that?  
7           A.     I see that.  
8           Q.     And "app creation date."  
9                   Do you see that?  
10           A.    I see that.                   09:08:39  
11           Q.    And then "access end date."  
12                   Do you see that?  
13           A.    I see that.  
14           Q.    And then "friend permissions."  
15                   Do you see that?                   09:08:48  
16           A.    I see that.  
17           Q.    So I won't make you count them myself, so  
18           you'll have to take my word, but I've gone through  
19           this entire list and I've counted 15 different apps  
20           for which the extension lasted beyond 2015.                   09:09:01  
21                   As Facebook's corporate designee, could  
22           you please explain to why this rog states there's  
23           only one app that had an extension longer than six  
24           months when, based on the information provided, it  
25           appears that there were at least 15 apps that had                   09:09:17

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HIGHLY CONFIDENTIAL

1 extensions for more than six months? 09:09:20

2 MR. SCHWING: Object to the scope.

3 Object to form.

4 THE DEPONENT: I don't -- I don't -- I'm

5 not able to -- to -- to -- I don't feel I can 09:09:31

6 answer that question. I'm not sure how this

7 information was -- was pulled or -- what it's

8 referring to or any -- or the caveats that may

9 be -- may be behind it.

10 Q. (By Mr. Loeser) Let's just pick one 09:09:47

11 example on page 360. If you look at [REDACTED]

12 [REDACTED]

13 Do you see that?

14 A. I see that.

15 Q. It says [REDACTED] 09:10:06

16 Do you see that?

17 A. I see that.

18 Q. It says [REDACTED]

19 Do you see that?

20 A. I see that. 09:10:23

21 Q. So that's access to these friend

22 permissions that was more than six months after the

23 deprecation of those permissions; is that right?

24 MR. SCHWING: Outside the scope. Object

25 to form. 09:10:35

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## HIGHLY CONFIDENTIAL

1 THE DEPONENT: I -- as I say, like I'm 09:10:38  
2 not an expert in -- in how this information was  
3 pulled or -- or the caveats behind it or the -- or  
4 the precise formulation of -- of the end date and  
5 how that was determined, and so I don't feel I can 09:10:52  
6 give an answer to that question, I'm afraid.

7 Q. (By Mr. Loeser) Why did Facebook allow  
8 access to friend permissions for a number of these  
9 apps into 2018?

10 MR. SCHWING: Object to form. Outside 09:11:11  
11 the scope.

12 THE DEPONENT: As I say, I'm -- I'm not  
13 sure as -- as I don't know exactly how this list  
14 was -- was pulled together and the caveats behind  
15 the data, and so I'm -- I'm not sure I can give an 09:11:24  
16 answer to that question, I'm afraid.

17 Q. (By Mr. Loeser) How did Facebook  
18 determine whether and for how long to grant each of  
19 the extensions identified on this list that lasted  
20 more than six months? 09:11:38

21 MR. SCHWING: Same objections.

22 THE DEPONENT: Again, I'm not sure how  
23 each of these extensions was -- was granted and why  
24 the access end date is listed here is beyond --  
25 beyond the six months or 12 months previously 09:12:01

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## HIGHLY CONFIDENTIAL

1 referred. 09:12:03

2 Q. (By Mr. Loeser) What did you do as  
3 Facebook's corporate designee to understand the  
4 reasons why for a number of the apps on this list  
5 the extensions lasted more than six months? 09:12:16

6 MR. SCHWING: Object to scope. Object to  
7 form.

8 THE DEPONENT: I spoke to -- I reviewed  
9 these -- these documents and I spoke to some of the  
10 engineers in -- involved in how the platform was -- 09:12:38  
11 how whitelists were applied. And that's what I did  
12 to prepare for this.

13 Q. (By Mr. Loeser) Those efforts didn't  
14 provide you with the information needed to answer  
15 the questions I have asked about why these 09:12:58  
16 extensions lasted longer than six months, right?

17 MR. SCHWING: Same objections.

18 THE DEPONENT: As I say, I tried like --  
19 I -- I don't have with me today an understanding  
20 of -- of why the access end date is listed in 2018 09:13:19  
21 for some of these applications. So no, I don't  
22 feel I can explain why that's listed in that column  
23 here.

24 Q. (By Mr. Loeser) Let's go to page 372.  
25 And this page identifies the second list that was 09:13:36

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## HIGHLY CONFIDENTIAL

1 referenced in Facebook's response to interrogatory 09:13:42  
2 No. 27, and I will read the description of the list  
3 at the top, and then I have a few questions for  
4 you.

5 This states: "The second list below 09:13:52  
6 consists of third-party applications that had  
7 access to capabilities which were associated with  
8 private APIs that may have allowed third-party  
9 application developers to query end points  
10 associated with data fields associated with a 09:14:10  
11 user's friends after the transition to Graph API  
12 v2."

13 Did I read that correctly?

14 A. I -- you did read that correctly.

15 Can I have a few minutes to -- to 09:14:23  
16 understand the context here?

17 Q. Yes, of course.

18 MR. SCHWING: Derek, would you remind me  
19 what page you were reading from?

20 MR. LOESER: I was reading from page 372. 09:14:36

21 MR. SCHWING: Thank you.

22 THE DEPONENT: Okay. I've had a chance  
23 to read now. Thank you.

24 Q. (By Mr. Loeser) Okay. Sure.

25 And so the description I just read is 09:15:46

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## HIGHLY CONFIDENTIAL

1 broken down into -- the list has several different 09:15:56  
2 types of partner on it, and I'm just looking at  
3 page 372. This list includes integration partners.

4 Do you see that?

5 A. I see that, yeah. 09:16:15

6 Q. And it includes business integrations.

7 Do you see that?

8 A. I see that too, yeah.

9 Q. What's the difference between a  
10 integration partner and a business integration? 09:16:25

11 MR. SCHWING: Outside the scope.

12 THE DEPONENT: I'm not sure I can provide  
13 anything more than -- is more than is included  
14 here. Integration partners use private APIs to  
15 provide Facebook's services to users. 09:16:47

16 Q. (By Mr. Loeser) And by --

17 A. As an example.

18 Q. I'm sorry.

19 A. The example provided there is the  
20 Facebook app on BlackBerry devices. 09:16:58

21 Q. Okay. Previously you mentioned  
22 integration partners or partners that had access to  
23 the developer platform, right?

24 MR. SCHWING: Misstates testimony.

25 Object to form. 09:17:13

## HIGHLY CONFIDENTIAL

1 THE DEPONENT: I would term any -- any 09:17:19  
2 app that was using the Facebook developer platform  
3 in -- in my explanation there, the Facebook  
4 developer platform refers to the APIs and services  
5 that were available to third-party developers, and 09:17:34  
6 so integration partners would be using the -- the  
7 Facebook developer platform.

8 Q. (By Mr. Loeser) And do business  
9 integrations use the Facebook developer platform?

10 A. Yes, I think it would be fair to say 09:17:50  
11 business integration use the Facebook developer  
12 platform.

13 Q. Do media integrations use the Facebook  
14 developer platform?

15 A. I'm not sure what's meant by "media 09:18:04  
16 integrations" here, but there may have been APIs  
17 made available through the Facebook developer  
18 platform for -- for media organizations.

19 Q. And do search integrations use the  
20 Facebook developer platform? 09:18:20

21 A. Again, I -- I would term that if they're  
22 using APIs that that would be a part of the  
23 Facebook developer platform.

24 Q. And do beta test APIs use the Facebook  
25 developer platform? 09:18:41

## HIGHLY CONFIDENTIAL

1           A.    Yes, I -- I would term, again, here that                   09:18:44  
2    if -- if it's an API that's -- that's made  
3    available by the Graph API, then I would have  
4    considered that to be the Facebook developer  
5    platform.   09:18:57

6           Q.    If you go the next page.  
7                   Do specialized consumer experiences use  
8    the Facebook developer platform?

9           A.    Again, here I'm -- the Facebook developer  
10   platform is a -- a term that I'm using here.   I'm                   09:19:12  
11   not sure it's been defined anywhere -- anywhere  
12   else.   So it's a term that I'm using here.

13                  So this -- these, to me, would include  
14   things that -- that use the Facebook developer  
15   platform, yes.   09:19:34

16          Q.    Okay.   And -- so what is the distinction  
17   from Facebook's perspective between integration  
18   partners and business integrations?

19                  MR. SCHWING:   Outside the scope.   Object  
20   to form.   09:19:51

21                  THE DEPONENT:   I'm not confident in --  
22   like I am not sure I can shed light on that beyond  
23   what the definitions are -- are here.   Integration  
24   partners are -- a defined -- defined in this  
25   document and listed here, and business integrations                   09:20:12

## HIGHLY CONFIDENTIAL

1 would be things other than those. 09:20:18

2 Q. (By Mr. Loeser) Does Facebook, the  
3 company, have a -- an understanding of the  
4 difference between integration partners and  
5 business integrations? 09:20:30

6 MR. SCHWING: Outside the scope. Object  
7 to form.

8 THE DEPONENT: I'm not sure I can answer  
9 that on behalf of the company beyond what's listed  
10 here. Integration partners have been -- a 09:20:45  
11 well-defined -- or defined in this document, but  
12 business integrations is -- is defined here with  
13 some illustrative examples.

14 Q. (By Mr. Loeser) So the list that's  
15 provided after this information about different 09:20:59  
16 types of partners covers pages 377 to 460, and  
17 these are "all of the -- all third-party  
18 applications that had access to capabilities which  
19 were associated with private APIs that may have  
20 allowed third-party application developers to query 09:21:24  
21 endpoints associated with data fields associated  
22 with the users' friends after the transition of  
23 Graph API version 2."

24 And you see if we go to page 377, at the  
25 top there's a header line, and the first entry is 09:21:39

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## HIGHLY CONFIDENTIAL

1 "name of application whitelisted for capability." 09:21:43

2 Do you see that?

3 A. I see that.

4 Q. And there's a "capability name" column?

5 A. I see that. 09:21:52

6 Q. "Associated data."

7 Do you see that?

8 A. I see that.

9 Q. And then "date access granted."

10 Do you see that? 09:21:59

11 A. I see that.

12 Q. "Date accessed revoked"?

13 A. I see that.

14 Q. And then it says "used since

15 October 2014." 09:22:06

16 Do you see that?

17 A. I see that.

18 Q. And the last column is "10 or fewer

19 installs."

20 Did I read that accurately? 09:22:13

21 A. You read that accurately.

22 Q. So where was the information obtained

23 from to populate this list?

24 MR. SCHWING: Object to outside the

25 scope. 09:22:29

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HIGHLY CONFIDENTIAL

1 THE DEPONENT: I do not -- I don't know 09:22:32  
2 specifically where the information -- like how --  
3 how this table was populated, but what -- what I  
4 can say more generally is that because this lists  
5 capabilities, then the capability tool would have 09:22:47  
6 been involved in -- in pulling this data.

7 Q. (By Mr. Loeser) And after 2020, was the  
8 capability tool updated to have any information  
9 about [REDACTED]  
10 [REDACTED] 09:23:07

11 A. Sorry. Can you -- can you just ask that  
12 again, because there's a detail in there I think  
13 matters.

14 Q. You mentioned that in 2020, a tool was  
15 implemented that allowed Facebook to [REDACTED] 09:23:19  
16 [REDACTED]  
17 [REDACTED]

18 A. My understanding is that in -- in 2020 a  
19 tool was built that [REDACTED]  
20 [REDACTED] 09:23:37  
21 [REDACTED]

22 Q. And what is that tool called?

23 A. I'm not sure what -- what the tool is  
24 called, but the -- my understanding is that the --  
25 the [REDACTED] 09:23:55

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## HIGHLY CONFIDENTIAL

1 Q. Could you spell that? 09:24:00

2 A. [REDACTED]

3 Q. Okay. And where are those tables  
4 maintained?

5 A. Sorry. When you say "where," do you mean 09:24:10  
6 physically or in which system? How do you mean  
7 "where"?

8 Q. Are they Hive tables, or are they some  
9 other type of table?

10 A. My understanding is that they -- they 09:24:23  
11 are -- they are stored in Hive, yes.

12 Q. And could you query those tables to

13 [REDACTED]

14 A. I couldn't query those tables, no.

15 Q. Could somebody at Facebook query those 09:24:38  
16 tables for that information?

17 A. I presume so. The tables exist, and some  
18 people at the company would have -- have the  
19 ability to query them.

20 Q. If you had an apps user's ID or a 09:24:54  
21 Facebook's user's ID, could you associate that  
22 Facebook user with the friend data in that table?

23 A. I'm not familiar with -- with a precise  
24 schema of those tables and how they work, so I  
25 don't want to speculate as to what is and isn't 09:25:12

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1 possible in using them. 09:25:16

2 Q. Now, as we saw, this list that covers  
3 pages 377 to 360 has a whole lot of apps  
4 identified. And when Facebook created these lists  
5 in response to interrogatories 15 and interrogatory 09:25:35  
6 27, did Facebook include entities that had access  
7 to friend data through the Events API or the Pages  
8 API or the Groups API or the Social Contexts API,  
9 taggable friends, invitable friends, and user  
10 posts? 09:25:56

11 MR. SCHWING: Objection. Outside the  
12 scope. Object to form.

13 THE DEPONENT: I'm not sure what -- I'm  
14 not able to comment on what was and was not  
15 included to -- to produce these -- these outputs. 09:26:07

16 Q. (By Mr. Loeser) Okay. So if those APIs  
17 had been included, would you expect to see them  
18 identified somewhere in this list?

19 MR. SCHWING: Same objection.

20 THE DEPONENT: This list lists 09:26:23  
21 capabilities specifically, as I understand it. And  
22 so this is a [REDACTED]

[REDACTED]  
[REDACTED]

25 Q. (By Mr. Loeser) Okay. This is a list, 09:26:47

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## HIGHLY CONFIDENTIAL

1 according to the description, of "third-party 09:26:48  
2 applications that had access to capabilities which  
3 were associated with private APIs that may have  
4 allowed third-party application developers to query  
5 endpoints associated with data field associated 09:27:00  
6 with the user's friends," right?

7 MR. SCHWING: Outside the scope.

8 THE DEPONENT: I'm -- I'm sorry. Not  
9 following where you reading that from.

10 Q. (By Mr. Loeser) I'm back on page 372, 09:27:20  
11 the description of the list.

12 A. Cool. Yeah. Thank you.

13 Q. Okay. And that description, "third-party  
14 applications that had access to capabilities which  
15 were associated with private APIs that may have 09:27:37  
16 allowed third-party application developers to query  
17 endpoints associated with data fields associated  
18 with the user's friends after the transition to  
19 Graph API v2."

20 Do you see that description? 09:27:51

21 A. I see that description, yes.

22 Q. And that description would apply to, for  
23 example, the Groups API, right?

24 MR. SCHWING: Outside the scope.

25 Go ahead. 09:28:01

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## HIGHLY CONFIDENTIAL

1 THE DEPONENT: So this is referring to 09:28:04  
2 private APIs or capabilities that gate private  
3 APIs. And I'm not sure when this list was -- was  
4 pulled, but the Groups API was -- was not a private  
5 API. 09:28:20

6 Q. (By Mr. Loeser) And --  
7 So it was a public API?

8 A. My understanding is that there was a  
9 Groups and is a Groups API that was generally  
10 available to -- to developers on the Facebook 09:28:41  
11 developer platform.

12 Q. What about the social context API? Is  
13 that publicly available?

14 A. The social context API was publicly  
15 available. It was -- it was later deprecated. I 09:28:54  
16 don't have the specific dates of that deprecation.

17 Q. Okay. So did it become a private API  
18 after that?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: I don't know how -- the 09:29:06  
21 mechanism by which the social context API was  
22 deprecated.

23 Q. (By Mr. Loeser) Has it been completed at  
24 any point?

25 A. Sorry. I'm pausing to make sure -- give 09:29:20

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## HIGHLY CONFIDENTIAL

1 Austin time if he wants to interject. 09:29:22

2 I -- my -- I -- I can't confirm. My --

3 completely. My understanding that it has been

4 completely deprecated and no longer exists in any

5 form, but I'm not 100 percent sure of that. 09:29:34

6 Q. Okay. And I read a list of different

7 APIs, and I'm going to read them again and you can

8 tell me if any of them fit the description for

9 what's supposed to be on this list.

10 You mentioned the Groups API and you say 09:29:49

11 it's not a private API, so it wouldn't be on this

12 list.

13 The Pages API?

14 MR. SCHWING: I'm going to object that

15 it's outside of the scope of the deposition. 09:30:00

16 THE DEPONENT: Yeah, I think this is --

17 this going to be complicated, because there's --

18 again, trying to helpful here. A phrase like "the

19 Pages API" could mean many different things. There

20 are -- there are capabilities which modify the 09:30:17

21 behavior of each of these APIs, and there are --

22 they're -- they're affected by permissions in

23 different ways.

24 So I'm just adding that caveat, given the

25 questions you -- 09:30:33

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Loeser) Let me try and make this 09:30:35  
2 really simple.

3 Facebook has created lists that  
4 supposedly show all of the APIs and all of the apps  
5 that got access to friend data, and I'm trying to 09:30:44  
6 understand if, when Facebook created those lists,  
7 it also included the series of APIs that you've  
8 testified about that were not -- that didn't have  
9 the word "friends" in them but also made friend  
10 data available. 09:31:02

11 And is there a list here or can -- well,  
12 let's start with that.

13 Is there any list provided by Facebook to  
14 date that identifies the apps that had access to  
15 these other APIs that we've talked about that 09:31:16  
16 emitted friend data?

17 MR. SCHWING: Object to form. Outside  
18 the scope.

19 THE DEPONENT: So my understanding is  
20 that these responses here are focused on either 09:31:28  
21 private APIs that may have emitted friend data or  
22 the friend permissions and the apps that had access  
23 too friend permissions.

24 Q. (By Mr. Loeser) And so the APIs that  
25 emit friend data that don't fall into those two 09:31:44

## HIGHLY CONFIDENTIAL

1 categories are not covered by the disclosures made 09:31:46  
2 by Facebook to date; is that right?

3 MR. SCHWING: Outside the scope of this  
4 deposition. Object to the form of the question.

5 THE DEPONENT: I don't know what's 09:32:03  
6 been -- what information -- I don't know the  
7 totality of the information that's been provided to  
8 date, so it's hard -- hard for me to comment on --  
9 on that.

10 The -- the information contained here is 09:32:12  
11 focused on the -- the friend permissions and the  
12 private APIs that may have enabled access to  
13 additional friends information.

14 Q. (By Mr. Loeser) Okay. So if the  
15 plaintiffs in this case asked Facebook to provide a 09:32:27  
16 list of all of the -- any other API that emitted  
17 friend data that was not already covered by the  
18 list we've just gone through, that is something  
19 Facebook could do, right?

20 MR. SCHWING: Outside the scope. Object 09:32:42  
21 to the form.

22 THE DEPONENT: I'm not able to comment on  
23 what -- on what Facebook can or can't do, given the  
24 APIs and the -- the data retention information that  
25 exists. So it's hard for me to -- to know and 09:32:57



## HIGHLY CONFIDENTIAL

1 answer without whether or not that would be 09:33:00  
2 possible.

3 Q. (By Mr. Loeser) Mr. Cross, are all of  
4 the -- the apps identified on this list cover or  
5 covering pages 377, 460 considered strategic use 09:33:18  
6 cases?

7 MR. SCHWING: Outside the scope. Object  
8 to form.

9 THE DEPONENT: As we've talked about  
10 here, there's -- there's no standard or formal 09:33:37  
11 definition for -- for what's considered a strategic  
12 use case or a strategic partner. So I -- I -- so  
13 your question was -- sorry. Ask -- I think your  
14 question was is everything on this list considered  
15 a strategic partner; is that -- 09:33:56

16 Sorry. Let me say: Can you ask your  
17 question again, please? Thanks.

18 Q. (By Mr. Loeser) Are all the apps  
19 identified on this list considered a strategic use  
20 case? 09:34:09

21 MR. SCHWING: Same objections.

22 THE DEPONENT: So I -- there's no --  
23 there's no standard or formal definition of what's  
24 considered a strategic partner or a strategic use  
25 case, so I couldn't comment on whether or not 09:34:25

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## HIGHLY CONFIDENTIAL

1 everything on this list is therefore considered 09:34:26  
2 strategic -- a strategic -- sorry -- is therefore  
3 considered a strategic use case.

4 Q. (By Mr. Loeser) So does Facebook have a  
5 record for each one of these apps of the reasons 09:34:35  
6 why the app was allowed to continue having access  
7 to friend data after 2015?

8 MR. SCHWING: Object to form. Outside  
9 the scope.

10 THE DEPONENT: I don't know what Facebook 09:34:54  
11 has about each of these applications and -- and why  
12 they continue to have access. It's possible there  
13 are records for some, but I -- I don't know if  
14 there's a record for every single one.

15 Q. (By Mr. Loeser) Okay. We can put that 09:35:42  
16 document aside.

17 (Exhibit 408 was marked for  
18 identification by the court reporter and is  
19 attached hereto.)

20 MR. LOESER: So I'm showing you an 09:36:26  
21 exhibit which is Exhibit 408, which a  
22 December 18th, 2018 Facebook Newsroom post.

23 What is the Facebook Newsroom?

24 THE DEPONENT: The Facebook Newsroom is  
25 Facebook's corporate blog. 09:36:44

## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Loeser) And is that a place 09:36:49  
2 where Facebook employees provide information to  
3 each other about Facebook products?

4 A. No, I wouldn't characterize it as a -- a  
5 way of Facebook employees providing information to 09:37:03  
6 each other about Facebook's products.

7 Q. Okay. What is the purpose of the  
8 Facebook Newsroom?

9 A. My understanding is it's a public blog  
10 that Facebook publishes blog posts publicly. 09:37:15

11 Q. And this blog post by -- by KP is  
12 captioned or titled "Let's clear up a few things  
13 about Facebook partners," right?

14 A. I see that.

15 Q. And you see it's written by KP, director 09:37:38  
16 of developer platforms and programs?

17 Do you see that?

18 A. I see that, yeah.

19 Q. So if we go down the blog a little bit.

20 KP writes: "Today, we're facing 09:37:48  
21 questions about whether Facebook gave large tech  
22 companies access to people's information and, if  
23 so, why we did this."

24 Do you see that?

25 A. I see that. 09:38:00

## HIGHLY CONFIDENTIAL

1 Q. And we've talked about some of the 09:38:02  
2 reasons why Facebook did this. And KP writes: "To  
3 put it simply, this work was about helping people  
4 do two things. First, people could access their  
5 Facebook accounts or specific Facebook features on 09:38:16  
6 devices and platforms built by other companies like  
7 Apple, Amazon, BlackBerry, and Yahoo. These are  
8 known as integration partners. Second, people  
9 could have more social experiences -- like seeing  
10 recommendations from their Facebook friends -- on 09:38:31  
11 other popular apps and websites like Netflix, the  
12 New York Times, Pandora, and Spotify."

13 Right?

14 A. I see that, yeah.

15 Q. Now, that's not a complete list of the 09:38:44  
16 types of partners that were given access to  
17 information by Facebook, is it?

18 MR. SCHWING: Object to the scope.  
19 Object to form.

20 THE DEPONENT: There are a -- a small 09:39:01  
21 number of companies listed here or integrations  
22 listed here. I wouldn't characterize that as a  
23 full list.

24 Q. (By Mr. Loeser) What are the -- other  
25 types that are missing from this list? 09:39:14

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Same objections. 09:39:17

2 THE DEPONENT: When you say "other types  
3 missing," like I'm not sure what you mean.

4 Q. (By Mr. Loeser) Well, let's go back to  
5 interrogatory -- the interrogatories, and if you 09:39:33  
6 look at page 372 and 373, there was a description  
7 of the different types of partners that were given  
8 access to friend data after the transition.

9 And you'll recall under the business  
10 integrations category, there was a series of 09:40:08  
11 descriptions, including [REDACTED]

[REDACTED]  
13 and so on.

14 And -- you see all those different types  
15 of partners? 09:40:31

16 A. I see a list of --

17 I'm sorry.

18 MR. SCHWING: Sorry. Outside the scope.

19 Go ahead.

20 THE DEPONENT: So I see a list of 09:40:39  
21 categorizations used in -- in the rog responses.

22 Q. (By Mr. Loeser) Okay. And so can you  
23 tell which of those are not included in KP's public  
24 posts about partners with whom Facebook shared  
25 information? 09:41:00

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Outside of the scope. 09:41:01

2 Object to form.

3 THE DEPONENT: Like -- yeah, I -- I don't

4 think I can give a authoritative explanation of --

5 of the mapping between these two things. I'm not 09:41:16

6 sure it's intended to be an authoritative mapping.

7 Q. (By Mr. Loeser) So KP was communicating

8 publicly about -- to explain to people whether

9 Facebook gave large tech companies access to

10 people's information, and if so, why, right? 09:41:37

11 MR. SCHWING: Object to outside the

12 scope. Object to form.

13 THE DEPONENT: So that's the -- those are

14 the words written in the blog post.

15 Q. (By Mr. Loeser) Okay. So he explained 09:41:48

16 why information was given to some partners but

17 not -- he didn't provide a complete description of

18 the partners to whom information was given by

19 Facebook, right?

20 MR. SCHWING: Same objections. 09:41:59

21 THE DEPONENT: There are -- he's

22 listed -- you know, given four and four example

23 here, and as we reviewed on the -- on the list,

24 there are -- there are other examples.

25 Q. (By Mr. Loeser) He didn't identify any 09:42:19

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## HIGHLY CONFIDENTIAL

1 of the -- what are referred to as "business 09:42:20  
2 integrations" in the interrogatory responses,  
3 right?

4 MR. SCHWING: Outside of the scope.

5 Object to form. 09:42:27

6 THE DEPONENT: As I said, I'm not sure  
7 what -- what "business integrations" is  
8 specifically referring to.

9 Q. (By Mr. Loeser) Okay. Well the  
10 interrogatory is pretty specific. 09:42:40

11 Did he include [REDACTED] in this public  
12 post about partners with whom Facebook shared this  
13 information?

14 MR. SCHWING: Same objections.

15 THE DEPONENT: The examples that he gives 09:42:52  
16 here do not include [REDACTED]

17 Q. (By Mr. Loeser) Do they include [REDACTED]  
18 [REDACTED]

19 MR. SCHWING: Same objection.

20 THE DEPONENT: The example -- 09:43:02  
21 Sorry, Austin.

22 MR. SCHWING: Sorry. I know it's getting  
23 late.

24 Same objections.

25 THE DEPONENT: I don't see him give those 09:43:10

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1 examples in this blog post, no. 09:43:12

2 Q. (By Mr. Loeser) Does he include [REDACTED]

3 [REDACTED]

4 MR. SCHWING: Same objections.

5 THE DEPONENT: I would categorize "[REDACTED]" 09:43:22

6 [REDACTED]

7 Q. (By Mr. Loeser) Okay. And what about

8 [REDACTED] Is

9 that on here?

10 A. The examples in the blog post do not 09:43:42

11 include anything I would -- I would consider a

12 [REDACTED]

13 Q. Let's go to the next page.

14 KP writes: "To be clear: None of these

15 partnerships or features gave companies access to 09:43:55

16 information without people's permission, nor do

17 they violate our 2012 settlement with the FTC."

18 Do you see that?

19 A. I want to make sure I find that passage

20 in the blog. Hang on. Give me a second. 09:44:12

21 I see it.

22 Q. Okay. So a Facebook user who used the

23 service or feature gave the partner or app

24 permission, right?

25 MR. SCHWING: Outside of the scope. 09:44:27

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HIGHLY CONFIDENTIAL

1 Object to form. 09:44:28

2 THE DEPONENT: My understanding is that

3 these -- the examples given here for -- for an

4 app -- for the apps to have access to information

5 through the user, the user would have to give 09:44:47

6 permission.

7 Q. (By Mr. Loeser) Okay. But these

8 partners and apps had access to friend-sharing

9 APIs; is that right?

10 A. I can't be 100 percent confident as to 09:44:59

11 which APIs and so on that these -- these apps were

12 using. But yes, some of would have access to -- to

13 friend information.

14 Q. And, sir, these -- those apps that did

15 have access to friend information could obtain 09:45:17

16 friend data from people who did not themselves use

17 the apps, right?

18 (Court Reporter asks clarification.)

19 Q. (By Mr. Loeser) The apps and partners

20 that could obtain friend data -- sorry. 09:45:33

21 Apps and partners that obtained friend

22 data could obtain this friend data from people who

23 do not themselves use the app or partners, right?

24 MR. SCHWING: Object to form.

25 THE DEPONENT: Exactly how these apps 09:45:55

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1 behaved changed over time, and so I -- I would need 09:45:56  
2 to give a -- understand the integrations more --  
3 more concretely and understand which time we're --  
4 we're talking about here.

5 Q. (By Mr. Loeser) What was the time period 09:46:15  
6 in which apps could obtain friend data from users?

7 A. My understanding is that the -- the  
8 friend permissions were removed in around  
9 April 2018.

10 Q. So up until that time, apps that had 09:46:34  
11 access to friend permissions could obtain that  
12 information from users that did not themselves use  
13 the app, right?

14 MR. SCHWING: Object to form.

15 THE DEPONENT: My understanding is that 09:46:52  
16 the -- the way some of these integrations worked  
17 allowed the integration or the app to access  
18 information about the logged-in user's friends.

19 MR. SCHWING: I just want to note that  
20 we're five minutes past our designated stopping 09:47:09  
21 time of 10:00 p.m. London time. I think there will  
22 be additional questioning, an additional session of  
23 the depo. I think this would be a good moment to  
24 stop.

25 MR. LOESER: Well, I'm in the middle of 09:47:26

## HIGHLY CONFIDENTIAL

1 questioning about this document, and I think 09:47:27  
2 it's -- probably make sense to finish that  
3 questioning. And then I'm quite close to the end.  
4 We can either stop after this document or if  
5 Mr. Cross wants to power through two more 09:47:36  
6 documents, three more documents, that will be all  
7 he'll hear from me.  
8 But why don't we finish with this  
9 document and then go off the record to decide  
10 whether we have the ability to do a bit more or if 09:47:47  
11 we should wrap it up today.  
12 Is that okay, Mr. Cross?  
13 THE DEPONENT: I'm comfortable finishing  
14 this document, but I think we should probably break  
15 after that. 09:48:02  
16 Q. (By Mr. Loeser) So when KP writes "none  
17 of these partnerships or features gave companies  
18 access to information without people's permission,"  
19 that wasn't actually true, was it?  
20 MR. SCHWING: Object to form. It's 09:48:13  
21 outside the scope.  
22 THE DEPONENT: I -- I can't comment on  
23 the -- on the -- the -- what was meant by -- in  
24 this blog post or how this blog post was formulated  
25 and what was meant by it. 09:48:29

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Loeser) What -- during the time 09:48:35  
2 that apps and partnerships could obtain friend data  
3 via friend permissions, they didn't need permission  
4 from the friends of the user in order to obtain  
5 that permission, right? 09:48:50

6 MR. SCHWING: Object. It's beyond the  
7 scope. Object to the form of the question.

8 THE DEPONENT: So, again, my  
9 understanding here is that integration partners had  
10 to get authorization from -- from the people who 09:49:11  
11 use the integration, and that's what's meant by  
12 "permission."

13 Q. (By Mr. Loeser) Okay. They didn't have  
14 to get authorization from the friends of the people  
15 who use the -- the integration, right? 09:49:25

16 MR. SCHWING: Same objections.

17 THE DEPONENT: In the past, my  
18 understanding is that a user could -- would log in  
19 to the application and give the application  
20 permission, and then the app would be able to 09:49:45  
21 access information about that user in there and  
22 some of their friends.

23 Q. (By Mr. Loeser) And it could get the  
24 information about some of their friends without the  
25 authorization from the friends, right? 09:49:58

## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to form. 09:50:00

2 THE DEPONENT: So I want to be --

3 you know, I'm going off my understanding of how  
4 these -- how some of those integrations worked in  
5 the past. 09:50:12

6 The user had to log in to an application  
7 for the app to then access information about that  
8 user and their friends.

9 Q. (By Mr. Loeser) Right. And I've asked  
10 you just a pretty simple question about the user's 09:50:21  
11 friends.

12 When that happened, did app could get  
13 information about the user who installed the app  
14 and the user's friends without getting  
15 authorization from the friends, right? 09:50:33

16 MR. SCHWING: Object to the form.  
17 Outside the scope.

18 THE DEPONENT: So my understanding is  
19 that the app had access to information about the  
20 user's friends without those -- all of those 09:50:45  
21 friends necessarily having used the application  
22 themselves.

23 Q. (By Mr. Loeser) Without those friends  
24 having given the app permission to access their  
25 data, correct? 09:50:59

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to the form. 09:51:02

2 Outside the scope. Asked and answered.

3 THE DEPONENT: Yeah, so I feel like

4 the -- we're reviewing here a blog post that was

5 written that I didn't -- you know, I wasn't super 09:51:16

6 closely involved in, and I haven't been prepared on

7 the exact determinations that were -- that were

8 used to create this blog post.

9 So like -- again, from my understanding

10 as a -- as -- as somebody who's worked in this area 09:51:32

11 and in past and spoken to many people involved is

12 that, yes, the way these applications worked was

13 that -- or some of these applications worked is

14 that some of them allowed the app to access

15 information about the logged-in user's friends even 09:51:50

16 though the logged-in user -- even though all of

17 those friends haven't necessarily used or

18 authorized the application.

19 MR. LOESER: Why don't we go off the

20 record. 09:52:05

21 THE VIDEOGRAPHER: We're off the record.

22 It's 10:10 p.m.

23 (Recess taken.)

24 THE VIDEOGRAPHER: We're back on record

25 it's 10:57 p.m. 10:38:17

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1 MR. SCHWING: All right. I note for the 10:38:20  
2 record that the parties have agreed that the  
3 deposition testimony will be treated as "Highly  
4 Confidential." The witness will review the  
5 testimony and provide any corrections, and we will 10:38:32  
6 also be reviewing the testimony given here today to  
7 make further distinctions about the confidential  
8 treatment of the materials.

9 SPECIAL MASTER GARRIE: So noted.

10 Counsel Loeser, any comment before we go 10:38:47  
11 off the record?

12 MR. LOESER: No. Just obviously we  
13 appreciate the designation. I don't think we agree  
14 with the designations, and understand you will be  
15 reviewing it for distinctions that may come up with 10:38:57  
16 different portions of the testimony.

17 MR. SCHWING: Thank you.

18 SPECIAL MASTER GARRIE: So noted for the  
19 record.

20 We can go off the record. 10:39:07

21 THE VIDEOGRAPHER: Okay. We are off the  
22 record. It's 10:57 p.m.

23 (TIME NOTED: 10:57 p.m.)

24

25 ---o0o--- 10:39:12

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1 I, SIMON CROSS, do hereby declare under  
2 penalty of perjury that I have read the foregoing  
3 transcript; that I have made any corrections as  
4 appear notes; that my testimony as contained  
5 herein, as corrected, is true and correct.

6 Executed this \_\_\_\_ day of \_\_\_\_\_,  
7 2022, at \_\_\_\_\_, \_\_\_\_\_.

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SIMON CROSS

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## HIGHLY CONFIDENTIAL

1 I, Rebecca L. Romano, a Registered  
2 Professional Reporter, Certified Shorthand  
3 Reporter, Certified Court Reporter, do hereby  
4 certify:

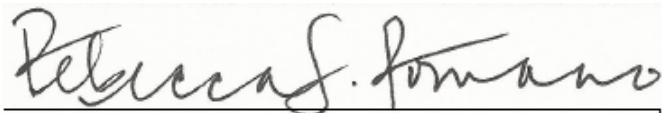
5 That the foregoing proceedings were taken  
6 before me remotely at the time and place herein set  
7 forth; that any deponents in the foregoing  
8 proceedings, prior to testifying, were administered  
9 an oath; that a record of the proceedings was made  
10 by me using machine shorthand which was thereafter  
11 transcribed under my direction; that the foregoing  
12 transcript is true record of the testimony given.

13 Further, that if the foregoing pertains to the  
14 original transcript of a deposition in a Federal  
15 Case, before completion of the proceedings, review  
16 of the transcript [X] was [ ] was not requested.

17 I further certify I am neither financially  
18 interested in the action nor a relative or employee  
19 of any attorney or any party to this action.

20 IN WITNESS WHEREOF, I have this date  
21 subscribed my name.

22  
23 Dated: June 8, 2022

A handwritten signature in cursive script, reading "Rebecca L. Romano", written in black ink on a light-colored background.

Rebecca L. Romano, RPR, CCR

CSR. No 12546

SIMON CROSS

si@fb.com

June 8, 2022

RE: FACEBOOK, INC., CONSUMER USER PROFILE LITIGATION

JUNE 6, 2022, SIMON CROSS, VOLUME III, JOB NO. 5265189

The above-referenced transcript has been  
completed by Veritext Legal Solutions and  
review of the transcript is being handled as follows:

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Contact Veritext  
to schedule a time to review the original transcript at  
a Veritext office.

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Locked .PDF  
Transcript - The witness should review the transcript and  
make any necessary corrections on the errata pages included  
below, notating the page and line number of the corrections.  
The witness should then sign and date the errata and penalty  
of perjury pages and return the completed pages to all  
appearing counsel within the period of time determined at  
the deposition or provided by the Code of Civil Procedure.

\_\_\_ Waiving the CA Code of Civil Procedure per Stipulation of  
Counsel - Original transcript to be released for signature  
as determined at the deposition.

\_\_\_ Signature Waived - Reading & Signature was waived at the  
time of the deposition.

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1 \_X\_Federal R&S Requested (FRCP 30(e)(1)(B)) - Locked .PDF

2 Transcript - The witness should review the transcript and  
3 make any necessary corrections on the errata pages included  
4 below, notating the page and line number of the corrections.  
5 The witness should then sign and date the errata and penalty  
6 of perjury pages and return the completed pages to all  
7 appearing counsel within the period of time determined at  
8 the deposition or provided by the Federal Rules.

9 \_\_\_ Federal R&S Not Requested - Reading & Signature was not  
10 requested before the completion of the deposition.

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HIGHLY CONFIDENTIAL

RE: FACEBOOK, INC., CONSUMER USER PROFILE LITIGATION  
SIMON CROSS, VOLUME III, JOB NO. 5265189

## E R R A T A S H E E T

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WITNESS

Date

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[&amp; - 3000]

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[comment - context]

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[context - cross]

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**[cross - definition]**

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**[definition - designations]**

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[give - happy]

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## [organizations - partners]

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[proper - questions]

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**[shorthand - specific]**

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[types - users]

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## [uses - ways]

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[yeah - zoom]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS  
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

-----  
This document relates to:  
ALL ACTIONS  
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ZOOM DEPOSITION OF FACEBOOK's 30(b)(6)  
CORPORATE REPRESENTATIVE - SIMON CROSS  
(Reported Remotely via Video & Web Videoconference)  
London, England (Deponent's location)  
Monday, June 20, 2022  
Volume 4

STENOGRAPHICALLY REPORTED BY:  
REBECCA L. ROMANO, RPR, CSR, CCR  
California CSR No. 12546  
Nevada CCR No. 827  
Oregon CSR No. 20-0466  
Washington CCR No. 3491  
JOB NO. 5281223  
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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

\_\_\_\_\_

This document relates to:

ALL ACTIONS

\_\_\_\_\_

CONTINUED VIDEOTAPED DEPOSITION OF SIMON CROSS, taken  
on behalf of the Plaintiffs, with the deponent located  
in London, England, commencing at  
1:35 p.m., Monday, June 20, 2022, remotely reported  
via Video & Web videoconference before  
REBECCA L. ROMANO, a Certified Shorthand Reporter,  
Certified Court Reporter, Registered Professional  
Reporter.

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APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

KELLER ROHRBACK L.L.P.

BY: DEREK W. LOESER

BY: CARI CAMPEN LAUFENBERG

BY: ADELE A. DANIEL

BY: EMMA WRIGHT

Attorneys at Law

1201 Third Avenue

Suite 3200

Seattle, Washington 98101

(206) 623-1900

dloeser@kellerrohrback.com

claufenberg@kellerrohrback.com

adaniel@kellerrohrback.com

ewright@kellerrohrback.com

/////

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APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

BLEICHMAR FONTI & AULD LLP

BY: MATTHEW MELAMED

BY: LESLEY E. WEAVER

Attorneys at Law

555 12th Street

Suite 1600

Oakland, California 94607

(415) 445-4003

mmelamed@bfalaw.com

lweaver@bfalaw.com

/////



HIGHLY CONFIDENTIAL

1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)

3  
4 For Facebook, Inc.:

5 GIBSON, DUNN & CRUTCHER LLP

6 BY: AUSTIN SCHWING

7 Attorney at Law

8 555 Mission Street

9 Suite 3000

10 San Francisco, California 94105-0921

11 (415) 393-8200

12 aschwing@gibsondunn.com

13 and

14 BY: MATT BUONGIORNO

15 Attorney at Law

16 2001 Ross Avenue

17 Suite 2100

18 Dallas, Texas 75201

19 (214) 698-3204

20 mbuongiorno@gibsondunn.com

21

22

23

24

25 //

HIGHLY CONFIDENTIAL

1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)

3  
4 For Facebook, Inc.:

5 GIBSON, DUNN & CRUTCHER LLP

6 BY: HANNAH REGAN-SMITH

7 Attorneys at Law

8 1801 California Street

9 Suite 4200

10 Denver, Colorado 80202-2642

11 (303) 298-5735

12 hregan-smith@gibsondunn.com

13 and

14 BY: PHUNTSO WANGDRA

15 Attorney at Law

16 1881 Page Mill Road

17 Palo Alto, California 94304-1211

18 (650) 849-5206

19 pwangdra@gibsondunn.com

20

21

22

23

24

25 //

HIGHLY CONFIDENTIAL

APPEARANCES OF COUNSEL(cont'd)

(All parties appearing via Web videoconference)

JAMS

BY: DANIEL B. GARRIE

Special Master

555 W. 5th Street

32nd Floor

Los Angeles, California 90013

(213) 253-9706

dgarrie@jamsadr.com

ALSO PRESENT:

Ian Chen, Associate General Counsel,

Meta Platforms

John Macdonell, Videographer

/////

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## I N D E X

DEPONENT	EXAMINATION
SIMON CROSS	PAGE
VOLUME 4	

BY MR. MELAMED	735
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## E X H I B I T S

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## DESCRIPTION

Exhibit 425	Native Excel Spreadsheet, HC_AEO_2022-06016_In re FB-TablesColumn Names;	867
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Exhibit 426	Native Excel Spreadsheet C2_022-FB-MTHD-00080;	920
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Exhibit 427	Native Excel Spreadsheet, FB-CA-MDL-029362498;	945
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Exhibit 428	Native Excel Spreadsheet, C2_018-FB-CA-MDL-02936296.	964
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1 London, England; Monday, June 20, 2022 09:04:04

2 1:35 p.m.

3 ---o0o---

4

5 THE VIDEOGRAPHER: We are on the record 01:35:43

6 at 1:35 p.m. on June 20th, 2022.

7 This is the deposition of Simon Cross,

8 Volume 4. We're here in the matter of the In Re:

9 Facebook, Inc. Consumer Privacy User Profile

10 Litigation. 01:35:59

11 I'm John Macdonell, the videographer with

12 Veritext.

13 Before the reporter swears the witness,

14 would counsel please identify themselves, beginning

15 with the noticing party, please. 01:36:09

16 MR. MELAMED: Good morning. My name is

17 Matt Melamed. I'm with the law firm of

18 Bleichmar Fonti & Auld. I represent plaintiffs.

19 With me here presently are Adele Daniel

20 and Emma Wright. They're from Keller Rohrbach, and 01:36:20

21 they also represent plaintiffs.

22 MR. SCHWING: This is Austin Schwing of

23 Gibson Dunn for defendant Meta, and with me are

24 Ian Chen, Hannah Regan-Smith, and Phuntso Wangdra

25 and Matt Buongiorno. 01:36:46

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1 Okay. I think I got everybody. 01:36:47

2 SPECIAL MASTER GARRIE: This is

3 Special Master Garrie on behalf of the courts.

4 Good morning, Counsel Buongiorno. It's

5 been a while. I hope you're healthy. 01:36:57

6 MR. BUONGIORNO: Thank you, Special

7 Master Garrie.

8 THE COURT REPORTER: At this time, I will

9 ask counsel to agree on the record that there is no

10 objection to this deposition officer administering 01:37:05

11 a binding oath to the deponent via remote

12 videoconference, starting with the noticing

13 attorney, please.

14 MR. MELAMED: No objection. Thank you.

15 MR. SCHWING: No objection for the 01:37:27

16 defendant.

17 THE COURT REPORTER: Mr. Cross, could you

18 raise your right hand for me, please.

19 THE DEPONENT: (Complies.)

20 THE COURT REPORTER: You do solemnly 01:37:45

21 state, under penalty of perjury, that the testimony

22 you are about to give in this deposition shall be

23 the truth, the whole truth and nothing but the

24 truth?

25 THE DEPONENT: I do. 01:37:45

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1 SIMON CROSS, 01:37:46

2 having been administered an oath, was examined and  
3 testified as follows:

4 EXAMINATION

5 BY MR. MELAMED: 01:37:46

6 Q. Welcome back, Mr. Cross.

7 A. Thank you.

8 Q. So as I mentioned, my name is

9 Matt Melamed from the law firm

10 Bleichmar Fonti & Auld. I'm going to be asking you 01:38:02

11 questions about the 30(b)(6) notice topics 2 and

12 8 today, and then, as I mentioned off the record,

13 Mr. Loeser is going to ask you a few questions

14 about topics 6 and 7.

15 So you understand for these topics, and 01:38:20

16 specifically for topics 2 and 8, you've been

17 designated by Facebook to answer questions on its

18 behalf, correct?

19 A. That's correct.

20 Q. Okay. And you are prepared to do so 01:38:29

21 today, correct?

22 A. I've done my best to prepare, yes.

23 MR. SCHWING: And, Matt, I just want to

24 just state for the record that we have certain

25 aspects of 2 and 8 that have been carved out for 01:38:39

Page 735

1 this witness. 01:38:42

2 MR. MELAMED: And to be clear, you're

3 talking about questions related to targeted

4 advertising and data brokers; is that right,

5 Mr. Schwing? 01:38:49

6 MR. SCHWING: That is correct.

7 MR. MELAMED: Okay.

8 Q. (By Mr. Melamed) So, Mr. Cross, just so

9 everybody's clear, you are not prepared to answer

10 questions today related to targeted advertising or 01:38:58

11 data brokers; is that right?

12 A. I have not prepared to answer questions

13 relating to targeted advertising and data brokers.

14 My understanding is that another witness has been

15 designated to -- to cover those types of things. 01:39:12

16 Q. Okay. So for ease of reference

17 throughout this deposition, I will likely ask about

18 third parties generally. And is it okay for you,

19 Mr. Cross and counsel, if when I ask those, you

20 understand that those do not include advertisers, 01:39:32

21 data brokers, and other parties related to targeted

22 advertising?

23 Is that -- Mr. Cross, does that make

24 sense to you? If I say "third parties," you will

25 understand it to not include those entities for 01:39:46

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## HIGHLY CONFIDENTIAL

1 which you are not prepared to testify? 01:39:49

2 A. Yes, I think that makes sense to me.

3 Q. And if you are unclear, please ask. And

4 I'm not -- this isn't to play tricks; it's just so

5 that I don't have to repeat a carve-out in every 01:40:01

6 question or series of questions.

7 Understood?

8 A. I understand, yes.

9 MR. MELAMED: Okay. And, Mr. Schwing,

10 same to you. If ever you believe a question 01:40:11

11 unclear because of that carve-out or you're not

12 sure what I'm getting at, I invite you to ask me to

13 clarify. I just want to make sure that the

14 testimony is -- is clear, but I'd like to avoid

15 having to add pause -- unnecessary pauses to every 01:40:24

16 question.

17 Does that make sense to you?

18 MR. SCHWING: It does. If we have things

19 that need to be clarified along the way, we'll try

20 to work that through. 01:40:37

21 MR. MELAMED: Great. Thank you.

22 Q. (By Mr. Melamed) So as you're aware,

23 Mr. Cross, there's a lot of material from past

24 experience that we are going to cover. I'm going

25 to hope to get through it as efficiently as 01:40:47

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## HIGHLY CONFIDENTIAL

1 possible. I hope you are going to do so as well. 01:40:49

2 Let's start with the description of the  
3 topics.

4 So for topic 2, there is a subcategory A.

5 And for that, plaintiffs are focused on the type of 01:41:00  
6 data Facebook sold, made accessible to, or made  
7 available to third parties.

8 Do you understand that?

9 MR. SCHWING: Matt, I think you -- I  
10 think it was unintentional. I think you misspoke 01:41:14  
11 and said "sold" instead of "shared."

12 MR. MELAMED: Thank you. Let me repeat  
13 that.

14 Q. (By Mr. Melamed) What type of data --  
15 make sure I'm reading this correctly. 01:41:25

16 The type of data --

17 MR. MELAMED: Thank you for the  
18 correction, Mr. Schwing.

19 Q. (By Mr. Melamed) The type of data  
20 Facebook shared, made accessible, or permitted 01:41:36  
21 third parties to target. That is the stated topic.

22 Do you understand that?

23 A. I do understand it. I'd love to  
24 understand where the boundary comes between making  
25 available to target, because that touches on 01:41:51

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## HIGHLY CONFIDENTIAL

1 targeted advertising, and I'd like to understand 01:41:55  
2 the -- the boundary there.

3 Q. Okay. So for purposes of questioning  
4 today, are you prepared to answer questions on the  
5 type of user data or information Facebook shared or 01:42:07  
6 made accessible to third parties, with the  
7 exception, as we spoke before, of targeted  
8 advertising and data brokers?

9 A. I'm prepared to -- to talk about data  
10 made available to -- to third parties via the -- 01:42:24  
11 the Graph API and the Facebook developer platform  
12 in particular.

13 Q. Are there any other ways that Facebook  
14 made data available to third parties? And, again,  
15 here -- and I'll repeat this a few times until we 01:42:41  
16 get in the habit -- this does not include to  
17 advertisers or data brokers.

18 A. When you say -- sorry. Again, to be  
19 clear, when you say "data" in this context, what  
20 kind of data are we -- are we talking about? 01:42:55

21 Q. User data.

22 A. So data on any particular user? "User  
23 data" meaning specifically what again? Again, I  
24 just want to be super clear.

25 Q. I'm just asking -- and if you're not 01:43:10

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## HIGHLY CONFIDENTIAL

1 clear and if you're unable to answer, tell me. 01:43:12

2 I'll try to do my best to clarify.

3 But the question is: Are you prepared to

4 answer questions about the types of user data for

5 user information that Facebook shared or made 01:43:21

6 accessible to third parties?

7 A. I've done my best to prepare on that --

8 on that topic, yes.

9 Q. And then you are also going to testify

10 about subtopic 2C -- correct? -- which is "the 01:43:40

11 format or formats through which Facebook made user

12 data or information accessible or available to

13 third parties," correct?

14 A. I'm prepared to testify on -- on that,

15 again, with this -- this focus on the Facebook 01:44:00

16 developer platform, which is what I believe is --

17 is pertinent to this case.

18 Q. Are there other ways that Facebook made

19 user data available to third parties, not including

20 targeted advertisers or data brokers? And by 01:44:15

21 "other ways," I'm speaking of other than via the

22 Facebook platform.

23 A. It's possible that like user data was

24 made available to third parties over -- over other

25 means. For example, attachments to emails, 01:44:33

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## HIGHLY CONFIDENTIAL

1 mentioned Facebook platform as a way that Facebook 01:46:01  
2 makes user data available to third parties,  
3 correct?

4 A. Correct.

5 Q. You also mentioned a possibility that 01:46:09  
6 user attach data could be attached to emails, and  
7 you're not prepared to testify about that manner of  
8 providing user data to third parties, correct?

9 MR. SCHWING: No. Misstates his  
10 testimony. 01:46:18

11 THE DEPONENT: As I said, I could talk at  
12 a high level about how Facebook conducts, you know,  
13 conversations with -- with third parties at a high  
14 level, but it would impossible to -- for me or  
15 anyone to -- to know the totality of ways in which 01:46:39  
16 Facebook, over a 15-year period, has made -- made  
17 data available to -- to third parties.

18 Q. (By Mr. Melamed) Why would that be  
19 impossible?

20 A. So in this context, you know, that's -- a 01:46:58  
21 broad range in which a way of essentially thousands  
22 of people over many years have interacted with --  
23 with third parties. I think having a -- a complete  
24 understanding of every example would be -- would be  
25 hard to come by. 01:47:18

## HIGHLY CONFIDENTIAL

1           As I say, the -- the primary way in which           01:47:20  
2       Facebook shares data with third parties is via the  
3       Facebook developer platform, and I focused my -- my  
4       attention there.

5           I can talk at a high level about           01:47:30  
6       typically how Facebook conducts business with third  
7       parties through with user data may have been  
8       exchanged. But, you know, I don't have a record of  
9       every email that was sent that may have contained  
10      a -- an Excel spreadsheet, for example, containing       01:47:45  
11      user information.

12          Q.    Are there ways other than via platform or  
13       via email that you are aware of that Facebook  
14       provided user data to third parties?

15          A.    I'm not aware of any other major ways in       01:48:07  
16       which Facebook would have shared data with -- with  
17       third parties, no.

18          Q.    Okay. I just want to be clear. You used  
19       the -- the phrase "major ways" in your answer to  
20       that question. Are there any other ways other than       01:48:18  
21       those that you are aware of?

22          A.    Not that I'm -- not that I'm intimately  
23       aware of, no.

24          Q.    Are there any ways you're aware of in any  
25       way?   01:48:33

A. No. Not that I know that Facebook has shared data with third parties from -- from my conversations with -- with people or -- or my own personal experiences.

01:48:36

9 Do you understand that to be the topic?

11 Q. And you mentioned the Graph API is the  
12 primary way that Facebook shares user data with  
13 third parties?

16 Q. Okay. We're going to turn to the  
17 Facebook developer platform in a little bit.

23           A.   That's correct.  I'm prepared to -- to  
24   testify on -- on how platform integrity teams  
25   attempted to do that. 01:50:26



## HIGHLY CONFIDENTIAL

1 Q. And then you are prepared as well to 01:50:31  
2 testify about topic 8, correct?

3 A. Would you just mind reading out just  
4 topic 8 for me so I can confirm accurately.

5 Q. No problem. 01:50:43

6 So topic 8 concerns "the methods, tools,  
7 technologies, databases, project management tools,  
8 task lists, and other internal sources Facebook  
9 used to track third parties and data brokers."

10 I understand that you are not prepared to 01:50:57  
11 talk about data brokers, but are you prepared to  
12 talk about the rest of that topic?

13 A. Again --

14 MR. SCHWING: Just -- sorry. Just  
15 quickly. And also advertisers, to the extent 01:51:07  
16 that's not encompassed by data brokers as well,  
17 Matt, just to have the record clear.

18 Q. (By Mr. Melamed) Are you prepared to  
19 talk about topic 8 with the exception of data  
20 brokers and advertisers? 01:51:20

21 A. Yes, I have done my best to prepare for  
22 topic 8.

23 Q. And that includes the four subsections of  
24 topic 8, correct?

25 A. Again, be useful if you'd just read them 01:51:32

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1 out for -- for extra clarity. 01:51:34

2 Q. Sure.

3 So the first subtopic is "the type and  
4 purpose of data and information Facebook received  
5 from third parties."

01:51:43

6 And to clarify, that does not include  
7 from advertisers or data brokers.

8 Are you prepared to answer that subtopic?

9 A. I've done my best to prepare for  
10 subtopic, yes.

01:51:55

11 Q. And topic b, "the type and purpose of  
12 data and information Facebook provided to third  
13 parties"?

14 A. Yes, I've done my best to prepare for  
15 that subtopic too.

01:52:05

16 Q. And "payments consideration, including  
17 actual payments and consideration or promised  
18 payments and consideration that Facebook provided  
19 or received for engaging in exchanges of user data  
20 with third parties" -- again, for clarity, not  
21 including advertisers and data brokers.

01:52:20

22 Are you prepared to answer on that topic?

23 A. I've done my best to prepare for that  
24 topic too -- that subtopic too, yes.

25 Q. And then the final subtopic is "any

01:52:33

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## HIGHLY CONFIDENTIAL

1 evaluation of benefits through Facebook of the 01:52:34  
2 information provided or received or engaging in  
3 exchanges of user data."

4 Are you prepared to testify about that  
5 topic today? 01:52:44

6 A. I have done my best to prepare for that  
7 subtopic, too.

8 Q. Do you have any notes to help with your  
9 testimony today?

10 A. I prepared a couple of pages of 01:53:00  
11 handwritten notes, yes.

12 Q. Okay. And you intend to use those to  
13 help you testify?

14 A. Potentially. It depends on the -- on the  
15 questions I'm asked to answer. 01:53:07

16 Q. You said you personally prepared those  
17 notes?

18 A. That's correct.

19 Q. And how -- how did you go about preparing  
20 those notes? 01:53:24

21 A. Those notes are written from my -- my  
22 notes from the conversations I've with people to  
23 prepare for today and some of documents I've read.

24 Q. Conversations with whom?

25 A. I had a number of conversations with -- 01:53:45

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## HIGHLY CONFIDENTIAL

1 with Facebook employees to prepare for this -- for 01:53:46  
2 the deposition today. I can give you their names  
3 if -- if required.

4 Q. Would you please give me their names.

5 A. Sure. I spoke to Steven Elia. I spoke 01:53:58  
6 to Chad Heaton. I spoke to Tina Cardaci. And I  
7 spoke to -- some of these names I forgot now, but  
8 I -- I could get for you if needed.

9 Q. What would you do to get their names  
10 for -- for us today? 01:54:30

11 A. Look at my calendar. Look at my Outlook  
12 calendar.

13 Q. And what did you speak to Mr. Elia about?

14 A. I spoke to Mr. Elia about his experience  
15 in managing API whitelisting and the way in which 01:54:46  
16 whitelists were tracked over time.

17 Q. Anything else?

18 A. Those are the primary topics we -- I  
19 discussed with Steven.

20 Q. You said they're the primary topics. Did 01:55:06  
21 you discuss anything else with Mr. Elia?

22 A. I don't recall discussing anything else  
23 with Steven beyond the -- the topics I was required  
24 to -- to prepare for today.

25 Q. Did your conversation go beyond -- with 01:55:20

## HIGHLY CONFIDENTIAL

1 Mr. Elia, did your conversation go beyond 01:55:22

2 discussions of API whitelisting and tracking?

3 A. It would have included identification of

4 how the API or the Facebook APIs behaved as -- as

5 far as discernable at any particular time or at 01:55:39

6 particular times, again, to help me prepare for the

7 topics I've been designated to -- to speak to

8 today.

9 Q. Anything else with Mr. Elia?

10 A. That's about the limit of what I recall 01:55:54

11 discussing with Steven.

12 Q. I just want to note that you -- as you're

13 answering these questions, there are a lot of

14 qualifiers, which is fine, and I'm just asking for

15 clarification when you provide those qualifiers. 01:56:08

16 So you said "it's about the limit" of

17 what you discussed with Steven. Do you recall

18 discussing anything else with Mr. Elia?

19 A. As I sit here today, that's what I recall

20 discussing with Steven. 01:56:22

21 Q. Okay.

22 What did you discuss with Mr. Heaton?

23 A. We discussed a particular document which

24 I believe has been marked for the use of it today.

25 Q. Do you recall which document that was? 01:56:36

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A. I don't recall the Bates number particularly, no. It was a document to do with the platform and interpreting its value to third-party developers.

01:56:43

7 MR. SCHWING: And I would just caution  
8 the witness not to reveal any attorney-client  
9 privilege information.

12 THE DEPONENT: My understanding is that  
13 it was a document marked for -- for exhibition  
14 today by -- by the plaintiffs, and I wanted to  
15 speak to Mr. Heaton to attempt to understand his 01:57:20  
16 understanding of the -- of the document and how it  
17 was created.

20           A.     I understand Mr. Heaton to have been                                 01:57:35  
21 involved in its creation, but I can't say for  
22 certain whether or not he was the creator.

25 A. My understanding is that Mr. Heaton is -- 01:57:49

## HIGHLY CONFIDENTIAL

1 is still employed by Facebook. 01:57:52

2 Q. And what is his role at Facebook?

3 A. I'm not certain of what his role is  
4 today, I'm afraid.

5 Q. Do you understand what his role was 01:58:02  
6 around the time that he was involved in creating  
7 the document that he reviewed?

8 A. My understanding is he had some role  
9 in -- in finance or business planning, but I  
10 wouldn't want to give any more specifics than that. 01:58:16

11 Q. Why wouldn't you want to give me more  
12 specifics than that regarding his role?

13 A. That's the understanding I have as I --  
14 as I sit here today. I have not reviewed his  
15 internal profile or work history, for example. 01:58:41

16 Q. How long did you speak to Mr. Heaton?

17 A. I spoke to Mr. Heaton for about 25  
18 minutes.

19 Q. How long did you speak to Mr. Elia?

20 A. I speak to Mr. Elia for around 55 01:58:58  
21 minutes.

22 Q. You mentioned you spoke to somebody whose  
23 name I don't think I caught, and I don't want to  
24 get it wrong, so please correct me. I think it was  
25 Ms. Cardaci? 01:59:14

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1 A. I spoke to Tina -- Tina Cardaci. 01:59:16

2 Q. Can you spell her last name just so we  
3 have it clearly for the record, please.

4 A. I'll do my best. I -- I may get it  
5 wrong. Cardaci, C-A-R-D-A-C-I, I believe. 01:59:28

6 Q. And what did you speak to Ms. Cardaci  
7 about?

8 A. I spoke to Ms. Cardaci about another  
9 document which I believe plaintiffs have identified  
10 to be exhibited today. 01:59:50

11 Q. And do you recall which document that  
12 was?

13 A. Again, I -- I don't know the Bates number  
14 or anything like that, but my understanding is it  
15 was a document relating to the assessment of the 02:00:02  
16 impact of the changes announced in April 2014 upon  
17 Facebook's games ecosystem.

18 Q. What kind of impact are you -- do you  
19 mean when you say "it was a document concerning the  
20 assessment of impact"? 02:00:28

21 A. My recollection is this is a -- a  
22 document to do with the potential revenue impact of  
23 the changes on the Facebook games ecosystem.

24 Q. And why did you speak to Ms. Cardaci  
25 about that document? 02:00:45

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## HIGHLY CONFIDENTIAL

1           A.    I believe that helped me understand the           02:02:10  
2   document better, yes.

3           Q.    And how long did you speak to  
4   Ms. Cardaci?

5           A.    I think about 25 minutes again.           02:02:19

6           Q.    Do you have notes regarding your  
7   understanding of either of the two documents we've  
8   just discussed? And by "the two documents," I mean  
9   the one you spoke about with Mr. Heaton and the one  
10   you spoke about with Ms. Cardaci.           02:02:43

11          A.    No, I do not have notes relating to my --  
12   my conversation with them.

13          Q.    Do you have any notes about the documents  
14   at all, whether -- whether or not those notes  
15   relate to your conversations with them?           02:02:54

16          A.    I do not have notes relating to those  
17   documents, no.

18          Q.    Who else did you talk to in preparation  
19   for today's testimony?

20          A.    I spoke to Mark Molaro -- I think that's           02:03:10  
21   right. Molaro, I think, is probably accurate. I  
22   spoke to him too.

23          Q.    Why did you speak to Mr. Molaro?

24          A.    Mr. Molaro, as I understand it, was  
25   involved in the production of documents relating to           02:03:28

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## HIGHLY CONFIDENTIAL

1 the capabilities tool and platform login, which I 02:03:34  
2 wanted to make sure I fully understood.

3 Q. Is Mr. Molaro a Facebook employee?

4 A. My understanding is that Mr. Molaro is  
5 employed by Facebook. 02:03:50

6 Q. And do you know what Mr. Molaro's role is  
7 presently at Facebook?

8 A. My understanding is he's a data science  
9 manager.

10 Q. Do you have any understanding whether his 02:04:10  
11 role involves anything having to do with the  
12 capabilities tool presently at Facebook?

13 A. I'm -- I'm not entirely -- I'm not sure  
14 what his role involves at the moment and whether or  
15 not he's involved in -- with the capabilities. 02:04:28

16 Q. Do you know if his role at any time  
17 during the time he's worked at Facebook included  
18 anything having to do with the capabilities tool?

19 A. My understanding is that he -- he has  
20 been involved with the capabilities tool in the 02:04:47  
21 past, at least.

22 Q. What is your understanding of  
23 Mr. Molaro's involvement with the capabilities tool  
24 in the past?

25 A. My understanding is that he will have 02:05:00

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25	A. I talked to Molaro, Mr. Molaro, over a	02:06:24
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1 few sessions. Hard to give an exact amount of 02:06:27  
2 time. I'd estimate spending probably 30 to 60  
3 minutes with Mark.

4 Q. Do you have any written notes reflecting  
5 your conversations with Mr. Molaro? 02:06:50

6 A. I have taken some notes about my  
7 conversation with -- my conversations with  
8 Mr. Molaro.

9 Q. And those notes pertain to the  
10 capabilities tool? 02:07:03

11 A. Those notes pertain to -- to parts of the  
12 capabilities tool and other -- other work he was  
13 involved in.

14 Q. What else do the notes concern?

15 A. I took some notes regarding some of the 02:07:23  
16 more [REDACTED] that Facebook has  
17 today.

18 Q. Is that a singular [REDACTED]

19 [REDACTED]

20 [REDACTED] that you're referencing? 02:07:46

21 A. Facebook has many different systems  
22 for -- for [REDACTED] and there -- in [REDACTED]

23 [REDACTED]

24 [REDACTED] [REDACTED]

25 [REDACTED] which was 02:08:08

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1 built more recently. 02:08:14

2 Q. What was that particular set of [REDACTED]

3 [REDACTED] built more recently that you

4 spoke to Mr. Molaro about?

5 A. I spoke to Mr. Molaro about some [REDACTED] 02:08:28

6 [REDACTED]

7 [REDACTED]

8 Q. [REDACTED]

9 A. That's correct, [REDACTED]

10 Q. Do those stand for anything or are they 02:08:44

11 just stand-alone terms?

12 A. My understanding is they're stand-alone

13 terms.

14 Q. Can you describe what the Can table is?

15 A. I'll do my -- my best. My understanding 02:08:57

16 is that the [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 Q. Does that include the user -- Facebook

20 user information that a [REDACTED] [REDACTED]

21 [REDACTED]

22 A. My understanding is it -- it -- it

23 enumerates the -- [REDACTED]

24 [REDACTED]

25 [REDACTED] 02:09:43

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## HIGHLY CONFIDENTIAL

1 Q. Do you know when the [REDACTED] was 02:09:51

2 created as a tool to provide [REDACTED]

3 A. My understanding it was built in around

4 2019 and became operational sometime in 2020.

5 Q. Do you know if it contains information 02:10:10

6 dating from before it became operational?

7 A. I do not know if it contains information

8 relating to before it became available.

9 Q. Who would know the answer to that

10 question? 02:10:25

11 A. I would ask Mr. Molaro.

12 Q. Do you know whether the [REDACTED] could

13 have technologically been created before 2019 or

14 2020?

15 A. Can you help me understand what you mean 02:10:56

16 by --

17 THE DEPONENT: Sorry, Austin. You were

18 going to say something?

19 MR. SCHWING: Just object to form.

20 Go ahead -- go ahead, Simon, if you 02:11:02

21 wanted to clarify something.

22 THE DEPONENT: Yeah. Can you clarify

23 what you mean by "could technologically have been

24 created"?

25 Q. (By Mr. Melamed) Was the [REDACTED] 02:11:12

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1 created -- let me withdraw that and restate it. 02:11:14

2 Was there new technology that became

3 available that enabled Facebook to create the [REDACTED]

4 [REDACTED] in or around the time that it became

5 created -- that it was created? 02:11:28

6 MR. SCHWING: Object to form.

7 THE DEPONENT: The development of these

8 [REDACTED] themselves would be -- I would

9 classify as new technology because they involved

10 code being written. 02:11:46

11 Q. (By Mr. Melamed) Was there anything that

12 prevented the code that was written for the [REDACTED]

13 [REDACTED] from being written at an earlier point in

14 time?

15 MR. SCHWING: Object to form. 02:12:01

16 THE DEPONENT: These -- these [REDACTED]

17 [REDACTED]

18 [REDACTED], and compute

19 and storage power in the past was -- was less than

20 it is today. And so it's -- it wouldn't have been 02:12:18

21 possible to -- to build these [REDACTED] in the form

22 they're in today in -- you know, it is in the past.

23 Q. (By Mr. Melamed) When did the computing

24 and storage power become sufficient to support

25 the -- [REDACTED] 02:12:46



## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to form. Outside 02:12:54  
2 the scope.

3 THE DEPONENT: The -- that's a hard  
4 question, I think, for -- for anyone to answer,  
5 because the -- the information that's contained in 02:13:04  
6 them or -- or the processing required to create  
7 them, there's -- there's no like one point in time  
8 where they would have suddenly become possible.  
9 Data infrastructure and technology has been  
10 continually improving over time. 02:13:24

11 Q. (By Mr. Melamed) Would it have been  
12 possible to have created the [REDACTED] at any time  
13 prior to when they were created, which I believe  
14 you said was 2019?

15 MR. SCHWING: Object to form. 02:13:47

16 THE DEPONENT: Again, like -- it's a  
17 hard -- hard question to answer. They -- they  
18 could have been created in a -- in a different form  
19 earlier. Like -- yeah, I'm just not sure I can --  
20 I can answer that question in -- in any way. It 02:14:05  
21 would be me speculating as to the compute processes  
22 required and -- and Facebook's data infrastructure  
23 capabilities at -- at the time. That's just --  
24 that's a level of detail, I think, is -- is hard  
25 for me to answer, I'm afraid. 02:14:20

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) If you wanted to 02:14:22  
2 understand better the answers to that question, who  
3 would you ask?

4 A. Again, my first point of call would be  
5 Mr. Molaro, who seems to be knowledgeable on these 02:14:35  
6 matters.

7 Q. Going back to the content of [REDACTED]  
8 you mentioned that it's -- it identifies which  
9 [REDACTED]  
10 [REDACTED] is that correct? 02:14:59

11 A. My understanding is that the -- the [REDACTED]  
12 [REDACTED]  
13 [REDACTED]

14 Q. How does the [REDACTED]  
15 [REDACTED] 02:15:23

16 A. My understanding is that are there is a  
17 [REDACTED]  
18 [REDACTED]  
19 [REDACTED]  
20 [REDACTED] 02:15:51

21 Q. So would it be possible for somebody at  
22 Facebook to look at [REDACTED]

23 [REDACTED]  
24 [REDACTED]

25 A. My understanding is that's the intent 02:16:17

## HIGHLY CONFIDENTIAL

1 of -- of the technology, although there are likely 02:16:19  
2 caveats and details as to what's possible that --  
3 that I'm -- that I'm not aware of. In -- in  
4 preparation for testimony today, I did my best to  
5 understand these systems at a high level. So 02:16:34  
6 that's a question I -- I don't think I'm able to --  
7 to answer for you, I'm afraid.

8 Q. All right. If you wanted to provide a  
9 more full answer to that question, would you ask  
10 Mr. Molaro? 02:16:51

11 A. Mr. Molaro would be one of the people I  
12 would ask to speak to for -- for more specific  
13 information.

14 Q. Who else would you ask to speak to for  
15 more specific information? 02:17:02

16 A. I would start with Mark.

17 Q. Is there anybody else that -- that you  
18 come to mind who you would speak to other than  
19 Mr. Molaro?

20 A. At this point, no. I would start with 02:17:18  
21 Mr. Molaro and go from there.

22 Q. Do you have any understanding of why the  
23 [REDACTED] was developed?

24 A. My understanding is that the [REDACTED]  
25 was developed to -- in response to some obligations 02:17:38

HIGHLY CONFIDENTIAL

1 in -- [REDACTED] 02:17:45

2 Q. [REDACTED]

3 [REDACTED]

4 A. I'm -- I'm not sure specifically exactly

5 which one it was referring -- was -- was the 02:17:57

6 results of the -- sorry. Let me answer that

7 question.

8 I'm not exactly which version of the [REDACTED]

9 [REDACTED]

10 [REDACTED] 02:18:11

11 Q. Who would you ask to find out which

12 [REDACTED]

13 [REDACTED]

14 A. I would, again, start with Mr. Molaro.

15 Q. What is your understanding of the [REDACTED]d 02:18:35

16 [REDACTED] [REDACTED]

17 A. My understanding of -- of the [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] 02:18:57

21 Q. Do you know when the [REDACTED] were  
22 created?

23 A. My understanding is they were -- they  
24 were built in 2019 and began to come online in --  
25 in 2020. 02:19:15

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HIGHLY CONFIDENTIAL

1 Q. Were the [REDACTED] created as 02:19:21  
2 part of the same -- let me withdraw that.

3 What was impetus for the creation of the

4 [REDACTED]

5 A. My understanding is -- is similarly that 02:19:40  
6 the -- the [REDACTED] were a response to some

7 [REDACTED]

8 [REDACTED]

9 Q. Do you know if the [REDACTED] [REDACTED] could have  
10 been created before they were created? 02:20:07

11 MR. SCHWING: Object to form.

12 THE DEPONENT: Again, similar to my

13 answer with the -- with the -- with the [REDACTED]

14 I'm not intimately involved in -- in understanding

15 of their complexity or the resources required to 02:20:28

16 create them, and so I -- I -- I don't feel like

17 that's an answer -- a question I can -- I can

18 answer.

19 Q. (By Mr. Melamed) Who would you ask if  
20 you wanted to know the answer to that question? 02:20:40

21 A. Similar to my previous answers, I would  
22 start with Mr. Molaro and -- and see if those  
23 questions were answerable by him or even answerable  
24 at all.

25 Q. Is -- sorry. Let me withdraw that. 02:21:00

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## HIGHLY CONFIDENTIAL

1 Do you have any understanding of how the 02:21:08

2 [REDACTED] work?

3 A. I have --

4 MR. MELAMED: Let me restate that.

5 That's a terrible question. 02:21:16

6 Q. (By Mr. Melamed) Do you have any  
7 understanding of how Facebook users inside at  
8 Facebook could -- could use the [REDACTED] to find  
9 information?

10 MR. SCHWING: Object to form. 02:21:29

11 THE DEPONENT: I -- I understand that  
12 certain Facebook employees would be able to query

13 [REDACTED]

14 [REDACTED] [REDACTED]

15 [REDACTED] 02:21:50

16 Q. (By Mr. Melamed) Do you know whether

17 they could [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] 02:22:11

21 A. I -- I -- my understanding is that these

22 [REDACTED] -- and therefore

23 that's theoretically possible, but I have not

24 queried the table myself, and so I'd be speculating

25 as to exactly what -- what's possible with these 02:22:32

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HIGHLY CONFIDENTIAL

1 tables. 02:22:34

2 Q. Do you understand whether the [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

02:22:49

6 [REDACTED]

7 MR. SCHWING: Object to form.

8 THE DEPONENT: Yeah, I'm -- I'm not

9 familiar with the precise structure of those

10 tables, so I'd be speculating as to -- as to

02:23:02

11 exactly what -- what is possible with them.

12 Q. (By Mr. Melamed) And who would you ask

13 to figure out what was possible in terms of

14 querying the [REDACTED]

15 THE DEPONENT: Similar. I would start

02:23:19

16 with Mr. Molaro and see where he goes from there.

17 Q. (By Mr. Melamed) Prior to the creation

18 of the [REDACTED]

19 [REDACTED]

20 MR. SCHWING: Object to form.

02:23:43

21 THE DEPONENT: Facebook has a number of

22 systems for [REDACTED]

23 [REDACTED]

24 [REDACTED]

25 [REDACTED]

02:24:15

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HIGHLY CONFIDENTIAL

1 [REDACTED] 02:24:19

2 [REDACTED]

3 [REDACTED]

4 Q. (By Mr. Melamed) So in that answer you

5 talked about [REDACTED] correct? 02:24:29

6 A. I likely mentioned [REDACTED],  
7 yes.

8 Q. Are you aware of any [REDACTED] that

9 existed before the [REDACTED]

10 [REDACTED] 02:24:52

11 [REDACTED]

12 A. I'm not aware, as I sit here today, of --

13 of any [REDACTED]

14 [REDACTED]

15 Q. In preparing for today, did you 02:25:17

16 investigate whether there existed [REDACTED]

17 [REDACTED]

18 A. Yes. I spoke to Mr. Molaro and Mr. Elia

19 about [REDACTED]

20 Q. And the answer was that Facebook [REDACTED] 02:25:48

21 [REDACTED]

22 A. My understanding is that there was --

23 [REDACTED]

[REDACTED]

[REDACTED]

02:26:04

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HIGHLY CONFIDENTIAL

1 Q. Were they ever [REDACTED] 02:26:12

2 [REDACTED]

3 A. It's hard -- were they -- were they ever

4 [REDACTED] Like ever?

5 Q. During -- during the time period at issue 02:26:30

6 in this case. And as a general matter going

7 forward for -- for the questions today, if you

8 don't understand, please clarify.

9 A. Sure.

10 Q. But as a general matter, my questions 02:26:38

11 will be from 2007 to present.

12 And so here we're talking about 2007 up

13 until the creation of the [REDACTED]

14 [REDACTED]

15 [REDACTED] 02:26:58

16 MR. SCHWING: Object to form.

17 THE DEPONENT: It's -- it's possible that

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 But from talking to the people who -- who

22 know this infrastructure well, [REDACTED]

23 [REDACTED]

24 Q. (By Mr. Melamed) [REDACTED]

[REDACTED]

[REDACTED] 02:27:40

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HIGHLY CONFIDENTIAL

1 [REDACTED] 02:27:44

2 A. [REDACTED]

3 [REDACTED] so hard to give

4 a comprehensive answer of all parts of the -- of

5 the time period. [REDACTED] 02:28:02

6 [REDACTED]

7 [REDACTED]

8 Q. When did you become -- first -- let me

9 withdraw that.

10 When -- on what date are you first aware 02:28:22

11 that [REDACTED]

12 A. I'm not sure of the precise date as to

13 which Facebook [REDACTED] [REDACTED]

14 [REDACTED]

15 [REDACTED] 02:28:46

16 significantly over the kind of 15-year -- year

17 period that you're asking about.

18 Q. [REDACTED]

19 [REDACTED]

20 A. [REDACTED] [REDACTED]

21 [REDACTED]

22 Q. [REDACTED]

23 [REDACTED] [REDACTED]

24 [REDACTED]

25 Q. Who would know that information? 02:29:22

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Responsibility	Percentage
Current government	8%
Previous government	9%
External factors	55%
Internal factors	28%

18 Q. Who on the data science team would you  
19 ask?

23 [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED] 02:30:49

HIGHLY CONFIDENTIAL

1 [REDACTED] 02:30:55

2 A. I am unaware as -- I'm not -- I'm not

3 fully confident in [REDACTED]

4 [REDACTED] This is when the beginning

5 of my involvement with platform begins, and I

02:31:15

6 recall -- again, in a personal capacity how I

7 recall like seeing information [REDACTED]

8 [REDACTED]

9 [REDACTED] -- is not

10 something I am able to testify about today.

02:31:36

11 Q. [REDACTED]

12 [REDACTED]

13 [REDACTED] but I

14 want to be -- I want to be clear here that this is

15 a long time ago, and it's hard to be -- for me to

02:32:03

16 be confident that I was involved in viewing

17 [REDACTED] in -- in late 2010. I joined the

18 company in September. So I -- I'm not sure I can

19 give a confident answer to that.

20 Q. What kind of information did [REDACTED]

02:32:27

21 reflect?

22 A. I don't recall exactly what -- what

23 information [REDACTED] would have -- would have --

24 would have requested -- would have stored.

25 Q. Did [REDACTED] reflect information on an

02:32:46

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HIGHLY CONFIDENTIAL

1 app-by-app basis? 02:32:52

2 A. Again, I -- I'm not entirely confident in  
3 how [REDACTED] worked or the information that was  
4 contained in it, and so I'd be speculating, I'm  
5 afraid. 02:33:06

6 Q. Does the information that was retained in  
7 [REDACTED] from 2010 -- sorry. Let me withdraw  
8 that and restate it.

9 Was the information that was reflected in  
10 [REDACTED] in 2010 retained by Facebook? 02:33:21

11 A. I'm not aware exactly what information  
12 from [REDACTED] has been retained and  
13 what hasn't. Again, that answer -- I did plenty of  
14 work to prepare for today's testimony. That's a --  
15 that's a very detailed question that I'm afraid I 02:33:44  
16 can't give an accurate answer to today.

17 Q. [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 Q. What is your recollection of the way in  
23 which [REDACTED]?

24 A. My understanding is that [REDACTED]

25 [REDACTED] now known as 02:34:30

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## HIGHLY CONFIDENTIAL

1 Hive, and there was another system that came into 02:34:41  
2 existence, but I'm unclear exactly when.

3 Q. What is the other system that you're --  
4 that you're referring to?

5 A. The other system I recall using to query 02:34:55  
6 [REDACTED] But  
7 exactly when [REDACTED] became -- came online and its  
8 relation to these other tools is not something I  
9 have a detailed lineage of, I'm afraid.

10 Q. Do you know whether the [REDACTED] 02:35:17  
11 [REDACTED] that were recorded in Hive  
12 exist for the entirety of the time that that -- let  
13 me withdraw that and restate it.

14 [REDACTED]  
15 [REDACTED] 02:35:40

16 MR. SCHWING: Object to form. Outside  
17 the scope.

18 THE DEPONENT: Again, I'm not -- I'm not  
19 sure exactly what Facebook has retained from which  
20 systems across a 15-year -- across a 15-year time 02:35:55  
21 period.

22 This data retention and storage is -- is  
23 a very special subject. I prepared to testify at a  
24 high level on these -- on these topics, but that  
25 level of detail is something I -- I don't have on 02:36:10

HIGHLY CONFIDENTIAL

1 hand today, I'm afraid. 02:36:14

2 Q. (By Mr. Melamed) Okay. If you wanted to  
3 see the [REDACTED]

4 [REDACTED]

5 A. I do not -- I do not know if that could 02:36:23  
6 be done.

7 Q. And who would you ask whether that can be  
8 done?

9 A. I would -- I would ask Mr. Molaro, again,  
10 as to whether or not I was -- that was possible 02:36:35  
11 or -- or -- or achievable.

12 Q. And you said you're not sure of -- well,  
13 let me -- let me ask this as a question.

14 What was the difference between the [REDACTED]

15 [REDACTED]

[REDACTED]

16 [REDACTED]

17 A. There's likely numerous differences which  
18 I -- I would not be able to enumerate all of the  
19 differences. One common difference is that the  
20 information stored in Hive became [REDACTED] 02:37:08

21 [REDACTED]

22 [REDACTED] whereas Scuba allowed [REDACTED]

23 [REDACTED]

24 Q. Let me return quickly to a question about  
25 the [REDACTED] 02:37:35

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HIGHLY CONFIDENTIAL

1 Where in Facebook's data infrastructure 02:37:39

2 are the [REDACTED]

3 A. My understanding is they're stored in

4 Facebook's Hive data warehouse.

5 Q. Do you know if they have a different name 02:38:08

6 within the Hive data warehouse, a [REDACTED]

7 [REDACTED]

8 A. Those -- those [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 Q. But you're not aware of them, of what

14 those names are, as you sit here today?

15 A. I don't recall the specific and full 02:38:39

16 names of those tables, no.

17 Q. [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 Is that -- is that your recollection too? 02:39:08

21 A. My -- my understanding is that in --

22 in -- [REDACTED]

23 [REDACTED]

[REDACTED] but in precisely what form,

24 I -- I don't recall, as I might be speculating.

25 Q. Is there a difference between the term 02:39:28

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## HIGHLY CONFIDENTIAL

1 "API hit" on one hand and the term "API call" on 02:39:30  
2 another?

3 A. Generally, the term "API hits" and "API  
4 calls" are synonymous and would typically be used  
5 interchangeably. 02:39:48

6 Q. And what -- what do those terms  
7 reference?

8 A. Those terms reference where -- where an  
9 application, which could be a first-party or a  
10 third-party application, for example, make a 02:40:06  
11 request to Facebook's API.

12 Q. Would an application have to receive  
13 approval or -- let me withdraw that.

14 Would an application have to receive  
15 permission from Facebook before making an API call? 02:40:23

16 A. Not necessarily. The API exists as -- as  
17 a server on the Internet, and it's possible to call  
18 those APIs without some form of authentication.  
19 But the information returned most likely in that  
20 circumstance would -- would be an error. It 02:40:56

21 depends on exactly the form of API call that's  
22 being made and exactly what -- what information is  
23 supplied at request time is a -- a degree of ways  
24 that that works.

25 Q. You mentioned that an API that was called 02:41:17

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## HIGHLY CONFIDENTIAL

1 without some form of authentication would likely 02:41:26  
2 return an error; is that right?

3 A. Well, the -- there are -- there are many  
4 ways -- there's lots of different APIs. I think  
5 their exact behavior differs from API to API, and 02:41:42  
6 the response provided will differ from API to API,  
7 and the information required to be provided by the  
8 third-party developer in order to get a successful  
9 response will also change from API method to API  
10 method. 02:42:06

11 Q. If an error was returned as a result of  
12 an API call, what form would that error take? Is  
13 there a common form that that error would take?

14 A. There are two common ways in which APIs  
15 generally signal error states. The first is an 02:42:30  
16 HTTP error code, and the second is returning an  
17 error object as part of the API response.

18 Q. Can you be more specific about each of  
19 those? Like what the HTTP error code say?

20 A. There's a list of standard HTTP error 02:42:55  
21 codes provided by the W3c, and an API provider  
22 would generally emit an API code -- sorry -- an  
23 HTTP error code that indicates the type of error  
24 that the API had encountered.

25 Q. You said a -- an API provider would 02:43:23

## HIGHLY CONFIDENTIAL

1 typically use one of these standard HTTP -- HTTP 02:43:31

2 error codes. Did Facebook generally -- I'm sorry.

3 Did Facebook respond with these typical  
4 HTTP error codes when a standard error code was --

5 That question got very messed up. Let me 02:43:56  
6 restate it.

7 Did HTTP -- did Facebook use the standard  
8 HTTP error codes in response to calls that were not  
9 permitted?

10 MR. SCHWING: Object to form. 02:44:20

11 THE DEPONENT: Again, the Facebook APIs  
12 have -- have changed in -- in form over -- over the  
13 time period we're talking about here, and the error  
14 returned would differ. The way errors would be  
15 expressed would differ depending on the -- the type 02:44:41  
16 of API being used or the API being used and -- and  
17 the method and how it had been implemented.

18 My recollection is that -- that the --  
19 that the Facebook -- that the Facebook APIs over  
20 time would have emitted HTTP error codes in some 02:44:56  
21 cases as one way of signaling errors.

22 I recognize the answer is -- is -- is  
23 heavily -- is a little complex, but the -- the --  
24 my understanding is at times HTTP error codes will  
25 have been one of the ways in which some Facebook 02:45:23

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## HIGHLY CONFIDENTIAL

1 APIs signaled error states. 02:45:26

2 Q. (By Mr. Melamed) At those times, were  
3 the HTTP error codes the typical HTTP error codes?

4 A. Again --

5 MR. SCHWING: I'm sorry. Object -- 02:45:38  
6 object to form.

7 Go ahead, Simon.

8 THE DEPONENT: Similarly, it -- it's hard  
9 to give a full and complete answer there because of  
10 the number of APIs that existed and how they 02:45:50  
11 changed over time.

12 It would typically be a good practice for  
13 an engineer implementing an API, if they were  
14 returning an HTTP error code, to return the one  
15 that most closely matched the situation that the 02:46:07  
16 API had encountered.

17 Q. (By Mr. Melamed) Did Facebook maintain a  
18 list of the error codes it returned from  
19 unsuccessful API calls?

20 A. The HTTP error code mechanism, there's 02:46:27  
21 only a standard set of HTTP error codes that the  
22 W3c did -- like -- codifies, and so that would  
23 generally be the list of error codes that an  
24 engineer would be able to choose from.

25 Q. You also mentioned error objects that 02:46:48

## HIGHLY CONFIDENTIAL

1 could get returned, correct? 02:46:51

2 A. That's correct, yes.

3 Q. Did Facebook maintain a list of the error  
4 objects that could be returned?

5 A. Facebook maintained some lists of errors 02:47:07

6 that could be returned, but I'm unclear -- you  
7 know, how to say when that list came into existence  
8 and whether or not it was possible for an engineer  
9 to emit an error that was more custom than one of  
10 the predefined ones. 02:47:32

11 Q. Does Facebook presently maintain a list  
12 of error objects that can be returned?

13 A. I am unaware of whether or not Facebook  
14 maintains a list of API error objects that --  
15 that -- that could be returned. 02:47:52

16 Q. Are you aware of whether Facebook ever  
17 retained a list of error objects that could be  
18 returned?

19 A. I recall in the past a system which was

20 [REDACTED] 02:48:08

21 [REDACTED]

22 but I couldn't say when that system started or --  
23 or stopped and -- and whether or not it was fully  
24 comprehensive of -- of the API responses that could  
25 be returned. 02:48:35

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## HIGHLY CONFIDENTIAL

1 Q. What was the name of that system? 02:48:37

2 A. I don't recall the precise name of that  
3 system. I'm -- I'm going from memory here on a --  
4 on a system that I -- that I recall, but  
5 couldn't -- couldn't give a very confident answer 02:48:55  
6 as to the name of.

7 Q. Do you have any recollection of what the  
8 name could have been or could have included?

9 A. The system I'm referencing here in my  
10 head I think may have been called "██████████" 02:49:12  
11 ██████████ but -- but, again, I -- I'm not  
12 entirely confident of -- of the precise name of  
13 that system.

14 Q. If you wanted to know more about the  
15 system, whatever it was named, who would you go to? 02:49:24

16 A. My first act would be to search for the  
17 name of that in Facebook's internal tools and  
18 systems and then speak to someone on the platform  
19 team as to whether or not it was relevant.

20 Again, I want to be clear: I'm trying to 02:49:49  
21 give here the best answers I can based on my -- my  
22 understanding and my memory. And I'm trying also  
23 be clear when I'm doing that from my personal  
24 memory and experiences versus a more general  
25 answer. 02:50:07

## HIGHLY CONFIDENTIAL

1 Q. Is there any individual you would ask 02:50:09  
2 about this system that was used to reference the  
3 error states that could be returned?

4 A. I would -- I would ask Steven Elia and  
5 see if he knew or knew who knew. 02:50:28

6 MR. SCHWING: Matt, we've been going for  
7 longer than an hour. Would this be a good time for  
8 a break?

9 MR. MELAMED: Yeah. Let me just ask a  
10 few more questions and then we'll take a break, if 02:50:39  
11 that works for you.

12 MR. SCHWING: Okay.

13 Q. (By Mr. Melamed) Is that okay,  
14 Mr. Cross?

15 A. Yeah, that's fine. 02:50:47

16 Q. Do you have any recollection about the  
17 time period? I know you don't have a specific  
18 recollection about this system that was used to  
19 [REDACTED], but do you recall any point in  
20 time when it was in use? 02:50:57

21 A. I -- I don't want to give an answer  
22 that -- that -- that's based on very, very poor  
23 memory of this. This is a -- you know, a system  
24 that I didn't have deep understanding or  
25 integration with from -- from, you know, eight or 02:51:17

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## HIGHLY CONFIDENTIAL

1 nine years ago. So I -- I'm just not sure I can 02:51:21  
2 give an accurate answer as to -- as to when it was  
3 sourced or in use.

4 Q. And you said you don't believe that -- am  
5 I correct that you do not believe the system is 02:51:38  
6 still in use today?

7 A. I do not know whether or not the system  
8 is in -- is in use today.

9 Q. But to find that out, you would ask  
10 Mr. Elia? 02:51:52

11 A. I would ask Steven, Mr. Elia, if he had  
12 an answer to that question of that specificity,  
13 yes.

14 Q. All right.

15 MR. MELAMED: Before we go off the 02:52:11  
16 record, Mr. Schwing and Mr. Cross, I'd like to ask  
17 for the notes that you are -- that you have taken  
18 in order to prepare for today. If you can produce  
19 those to us, I'd appreciate it, and doing so  
20 immediately so that we can review them and use them 02:52:25  
21 during today's questioning.

22 Mr. Schwing, if that's okay with you or  
23 if that's something you want to discuss off the  
24 record?

25 MR. SCHWING: Yeah. Why don't we take a 02:52:38



## HIGHLY CONFIDENTIAL

1 look at the notes just to make sure there's nothing 02:52:39  
2 that's -- you know, for example, in terms of being  
3 privileged. And we can address that further, Matt.  
4 I think we can probably work it out.

5 MR. MELAMED: The only note I would make 02:52:52  
6 to that point is if there -- if there is something  
7 that is attorney-client privileged that Mr. Cross  
8 is using to testify from, it's no longer  
9 attorney-client privilege, and that will be waived.

10 But happy to deal with that off the 02:53:06  
11 record and, of course, take a look at those. But  
12 we would just ask that you do so as quickly as  
13 possible so we can use them during today's  
14 testimony.

15 MR. SCHWING: Yeah, I -- I understand the 02:53:17  
16 request. We'll take a look at the notes and we can  
17 follow up with you.

18 MR. MELAMED: Okay.  
19 Happy to go off the record.

20 THE VIDEOGRAPHER: Okay. We're off the 02:53:24  
21 record. It's 2:53 p.m.

22 (Recess taken.)

23 THE VIDEOGRAPHER: We're back on the  
24 record. It's 3:18 p.m.

25 Q. (By Mr. Melamed) Before the break we 03:18:46

HIGHLY CONFIDENTIAL

1 were talking about the [REDACTED]. 03:18:48

2 Do you remember that?

3 A. Yeah, I remember talking about those.

4 Q. Does the [REDACTED]

5 [REDACTED] 03:19:03

6 A. [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 Q. Does not -- let me withdraw that.

10 What about the [REDACTED] [REDACTED] [REDACTED]

11 [REDACTED]

12 [REDACTED]?

13 A. My understanding is that the -- [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 Q. Is the answer the same regarding whether

19 the [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 A. I -- I -- I'd be -- as I sit here today,

24 you know, not entirely sure of the precise

25 information that's logged in that -- in that table. 03:20:40

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## HIGHLY CONFIDENTIAL

1 Q. Who would you ask to determine whether 03:20:48  
2 the [REDACTED]

4 A. To answer a question of that specificity,  
5 I -- I'd speak to Mr. Molaro and see if he knew the 03:21:08  
6 answer.

7 Q. What types of user data did Facebook  
8 share or make accessible to third parties?

9 MR. SCHWING: Objection. Vague.

10 THE DEPONENT: The -- the amount of -- 03:21:46  
11 the types of user data that Facebook has made  
12 available to -- to third parties via the Facebook  
13 developer platform has -- has changed over time.

14 Typically the Facebook developer platform would  
15 emit information about the -- the user who was 03:22:02  
16 using the application who was integrated with the  
17 API and typically access to information on their  
18 Facebook profile which was made available via the  
19 API.

20 Q. (By Mr. Melamed) Does Facebook have an 03:22:28  
21 internal taxonomy of the types of user information  
22 that it made available via the API?

23 MR. SCHWING: Object to form.

24 THE DEPONENT: The way API works is  
25 organized around a concept of nodes and edges, and 03:22:49

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## HIGHLY CONFIDENTIAL

1 the Graph API is organized around this concept of 03:22:55  
2 nodes and edges and fields on those nodes. And so  
3 that -- that concept is -- is relatively well --  
4 well understood.

5 Q. (By Mr. Melamed) And you mentioned that 03:23:15  
6 the type of user information that Facebook shared  
7 or made accessible to third parties has changed  
8 over time, correct?

9 A. Sorry. The -- which information has been  
10 made available to third parties has -- has changed 03:23:31  
11 over time? Sorry. So that's probably what I was  
12 referring to.

13 Q. Okay. How has the information that was  
14 made available to third parties changed over time?

15 MR. SCHWING: Object to form. 03:23:52

16 THE DEPONENT: So one of the ways that  
17 the information made -- made available to third  
18 parties has changed over time involves the -- the  
19 type of IDs which are emitted via the -- the  
20 Facebook developer platform. 03:24:06

21 In its inception, the API emitted  
22 canonical user IDs but over time has moved to app  
23 scoped user IDs and page scoped user IDs as -- as  
24 the identifying mechanisms for users. That's --  
25 that's one example of the ways in which the 03:24:29

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## HIGHLY CONFIDENTIAL

1 information that's emitted has changed over time. 03:24:31

2 Q. (By Mr. Melamed) Are there other  
3 examples of the ways in which the user information  
4 that Facebook emits to third parties has changed  
5 over time? 03:24:43

6 A. So another example in which the Facebook  
7 emits user information has changed over time  
8 involves the advent of platform permissions, which  
9 were a concept introduced in, I think, 2010, which  
10 allowed users to grant applications access to 03:25:04  
11 specific subsets of their profile information, for  
12 example.

13 Q. Are there other changes in the way the  
14 user information has -- is emitted via APIs?

15 A. Other ways in which the -- help me 03:25:36  
16 understand what you mean by "the way." Do you mean  
17 from a more technical perspective or some other  
18 form?

19 Q. Fair enough. You just gave two examples  
20 of changes. I'm looking for other changes. And as 03:25:47  
21 you sit here today, you may not know each  
22 individual change that was made over the -- the  
23 decade-plus time period we're talking about, but  
24 you've hit on a couple of -- of large changes,  
25 right? The way in which IDs were emitted and the 03:26:01

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## HIGHLY CONFIDENTIAL

1 way that permissions came into being. 03:26:05

2 I'm asking for other changes in the way  
3 that user data was emitted over time that are  
4 similar -- similar to -- in scale to those.

5 Does that make sense to you? 03:26:22

6 MR. SCHWING: Object to form.

7 THE DEPONENT: So let -- let me see if I  
8 can think of some other examples. Just give me a  
9 second. I want to make sure I give you an example  
10 that's valuable. 03:26:59

11 So another example that I think is worth  
12 calling out is the advent of API versioning as --  
13 as a way in which the information that is made  
14 available to third parties has changed over time.

15 Prior to the advent of API versioning, 03:27:24  
16 APIs would configure the way in which they wanted  
17 information made available to them. With the  
18 advent of API versioning, developers could request  
19 the API version they wanted at the time they made  
20 the API call. 03:27:46

21 So I think that's another example in  
22 which the way the information was emitted over time  
23 changed.

24 Q. (By Mr. Melamed) Are there any other  
25 examples that you can think of of the ways in which 03:27:56

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HIGHLY CONFIDENTIAL

1 information was emitted over time changed? 03:28:00

2 A. Another example I can think of is that in

3 the earliest -- early iterations of the platform,

4 there was a technology [REDACTED]

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 Q. Any other examples you can think of of

9 the ways in which information was emitted over time

10 changed? 03:28:53

11 A. Another example I can think of is the way

12 that user authentication was performed within

13 Canvas applications on the Facebook developer

14 platform.

15 I recall in the original version, the 03:29:12

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 Q. Do you recall when that change occurred?

23 A. I think that change occurred in -- in

24 around 2010, 2011, but I'm -- I'm not 100 percent

25 confident on the date, but around that time. 03:29:54

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## HIGHLY CONFIDENTIAL

1 Q. Do you recall any other changes in the 03:29:56  
2 way that information was emitted over time?

3 A. Another example I can think of is the  
4 change from the rest API to the Graph API. The  
5 rest API was Facebook's API design launched in 2007 03:30:16  
6 or 2008 along with the original Facebook developer  
7 platform. The Graph API was launched in 2010, as I  
8 understand it.

9 And those were two different mechanisms  
10 of -- of -- of ways in which developers could 03:30:40  
11 access user information via Facebook platform.

12 Q. Are there other examples you can think of  
13 of the way in which the data that was emitted  
14 changed over time?

15 A. Sorry. Examples in which the -- the way 03:31:06  
16 that data that was emitted?

17 Q. I'm sorry. The term we've been using has  
18 been "information," so I didn't mean to change the  
19 term.

20 Are there other examples you can think 03:31:14  
21 of -- of the way that information was emitted over  
22 time changed?

23 A. At a high level, the Facebook API has  
24 developed over -- you know, the Graph API in  
25 particular has developed over -- over several 03:31:37

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## HIGHLY CONFIDENTIAL

1 years, and there have been new fields added, edges 03:31:40  
2 and objects taken away, and permissions changed as  
3 well.

4 So a whole range of -- of ways in which  
5 information was -- was made available or the way -- 03:31:56  
6 you know, what apps had access to what has changed  
7 over time.

8 Q. I want to go back to the list you just  
9 gave and ask a few questions about each example.

10 So you started with the types of IDs that 03:32:15  
11 were available, and you said at the inception it  
12 was canonical IDs.

13 Can you explain what you mean when you  
14 meant when you used the "canonical"?

15 A. Yes, when I use the phrase "canonical," 03:32:30  
16 I'm referring to a Facebook user's ID in the  
17 Facebook database that was created for them when  
18 they signed up to Facebook.

19 Q. And what is the difference between that  
20 and an app scoped ID? 03:32:52

21 A. An app scoped ID is an ID for a user  
22 which is stable within the context of a particular  
23 app, but that ID for that user may differ between  
24 applications.

25 Q. And what is the difference a canonical 03:33:15

## HIGHLY CONFIDENTIAL

1 Facebook ID and a page scoped ID? 03:33:18

2 A. It's similar to an app scoped user ID  
3 except the user ID is different for the same user  
4 within the context of different pages.

5 Q. When did Facebook stop emitting canonical 03:33:39  
6 IDs?

7 A. There are circumstances in which  
8 canonical IDs are likely still being emitted today.

9 Q. When did Facebook commence app scoped  
10 IDs? 03:34:02

11 A. Facebook began emitting app scoped user  
12 IDs in April 2014.

13 Q. And when did Facebook commence using page  
14 scoped IDs?

15 A. The existence of page scoped IDs began 03:34:22  
16 later and was used in the Messenger app, a  
17 Messenger API context, I think, first; and then was  
18 later brought to the Graph API when interacting  
19 with pages.

20 I think the time was -- was -- was around 03:34:43  
21 2015, 2016 that -- that those changes began to be  
22 made.

23 Q. Why was the page scoped ID -- let me  
24 withdraw it and restate it.

25 Is there a reason that the page scoped ID 03:35:02

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## HIGHLY CONFIDENTIAL

1 was not started at the same time of the app scoped 03:35:05  
2 IDs with Facebook?

3 A. The changing of the ID scheme is -- is a  
4 significant change for developers. The move to  
5 page scoped IDs in the Graph API, my understanding 03:35:27  
6 was done to unify the ID space between the Graph  
7 API and the messaging -- the business messaging and  
8 the Facebook Messenger for Business APIs.

9 Q. Was the development of the app scoped IDs  
10 a significant undertaking? 03:35:52

11 MR. SCHWING: Object to form.

12 MR. MELAMED: I'm sorry. Let me rephrase  
13 that.

14 Q. (By Mr. Melamed) You said the changing  
15 of an ID scheme is a significant change for 03:36:03  
16 developers in your prior answer.

17 So my question is: Was -- was the change  
18 to an app scoped ID a significant change for  
19 developers at Facebook?

20 A. Sorry. Can you help me understand. Are 03:36:18  
21 you asking whether or not it's a significant change  
22 for developers or it was a significant  
23 development -- it took significant time development  
24 for Facebook?

25 Q. Did it take significant time to develop 03:36:28

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## HIGHLY CONFIDENTIAL

1 app scoped IDs at Facebook? 03:36:30

2 A. The developer -- the development of app  
3 scoped IDs involved several engineers over -- over  
4 several months, so it -- it wasn't an insignificant  
5 amount of work, but it's hard for me to know what 03:36:46  
6 "significant" means, you know, at Facebook's  
7 context. There's all kinds of things that...

8 Q. Understood. I was trying to use the  
9 language you had used, but I understand what you're  
10 saying. 03:37:00

11 A. So -- so to be clear, when I used the  
12 language, my -- my assertion was that it's a -- it  
13 was a significant change for developers to -- to --

14 Q. Sorry.

15 A. -- to -- 03:37:12  
16 Sorry. Go ahead.

17 Q. I'm sorry for interrupting you.

18 When you say "a significant for  
19 developers," do you mean significant change for  
20 third-party developers? 03:37:20

21 A. Yes. It -- it would mean a significant  
22 change for third-party developers.

23 Q. Do you know whose impetus it was to  
24 change to app scoped IDs?

25 A. I don't think it was any particular 03:37:38

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## HIGHLY CONFIDENTIAL

1 person's impetus. It -- the -- the concept, I 03:37:40  
2 recall being discussed internally by several  
3 people, and so I'm not -- I'm not sure there was  
4 any one person who -- whose impetus it was to  
5 change to app scoped IDs. 03:37:57

6 Q. Do you recall when these first  
7 discussions occurred concerning changing to app  
8 scoped IDs?

9 A. There were likely discussions that --  
10 that I was not a part of. The first time I've -- I 03:38:12  
11 recall becoming aware of them as a -- this is a  
12 concept, and I think reviewing documents in which  
13 they were discussed, is around, you know, late  
14 2013.

15 Q. Why was the change made to app scoped 03:38:35  
16 IDs?

17 A. There were a number of reasons why app  
18 scoped IDs were seen as a valuable change. The  
19 first is that it would allow -- would make it hard  
20 for developers to collect data from multiple 03:39:00  
21 applications and merge it together into a single  
22 dataset.

23 Q. So before app scoped IDs were used and  
24 during the time when canonical -- let me break it  
25 down into two questions. Sorry. 03:39:21

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1 Before app scoped IDs were used, is it 03:39:23  
2 accurate to say that canonical IDs were used?

3 A. Before app scoped IDs came into use,  
4 Facebook developer platform would have emitted  
5 canonical IDs user IDs to refer to -- to users. 03:39:40

6 Q. And during that time that canonical IDs  
7 were used to refer to users, it was easier for  
8 developers to collect data from multiple  
9 applications and merge it together in a single  
10 dataset than it would be later when app scoped IDs 03:39:57  
11 were used, correct?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: With canonical IDs, if a  
14 developer owned or -- or used multiple apps, then  
15 it would have been [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

18 Q. (By Mr. Melamed) In your response, you  
19 just said it would have been [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

22 A. It would have been technically possible  
23 for them to do so.

24 Q. Is there anything other than technology  
25 that prevented them from doing so? 03:40:54

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to form. 03:41:01

2 THE DEPONENT: It's -- it's possible that  
3 Facebook's platform policies prevented or were --  
4 or asked developers not to share information  
5 between apps, but exactly how those policies were 03:41:13  
6 written and how they were -- how they were -- yeah,  
7 how they were written and changed over time is --  
8 is, you know -- is something kind of -- I think  
9 other people are better placed to answer than me.

10 So I'm -- I'm not a complete expert on 03:41:31  
11 Facebook's platform policies.

12 So hopefully that -- hopefully that gives  
13 you an answer.

14 Q. (By Mr. Melamed) Understood. I just  
15 want to clarify so I understand your testimony 03:41:43  
16 about that.

17 Was there something in the policies that  
18 would have made it impossible for developers to  
19 link information from different apps that used the  
20 same canonical ID? 03:41:57

21 MR. SCHWING: Outside the scope of the  
22 deposition. Object to form.

23 THE DEPONENT: So policies are a --  
24 you know, a way of Facebook telling developers what  
25 Facebook thinks is -- i's appropriate or not with 03:42:17

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## HIGHLY CONFIDENTIAL

1 the information. So -- and, again, as I said, like 03:42:22  
2 I'm not an expert in what Facebook's policies did  
3 and did not permit at any given time.

4 So a policy -- a platform policy is a  
5 written document. That doesn't, you know, prevent 03:42:32  
6 a user doing something or -- sorry. Let me back  
7 up.

8 Doesn't prevent a developer from -- from  
9 doing something, but it -- it's a clear statement  
10 that that is not something Facebook would -- would 03:42:47  
11 have approved of, if indeed there was a policy  
12 written to that effect.

13 Q. (By Mr. Melamed) Thank you. That helps.

14 I think this is a good transition to  
15 topic 2d, where it's my understanding that Facebook 03:43:05  
16 has identified somebody else to testify about 2d,  
17 except that you are going to testify about it today  
18 concerning a technical aspect relating to the  
19 platform integrity team, and the topic is "how  
20 Facebook ensured third parties' use of data and 03:43:26  
21 information is limited to the use case."

22 So can you tell me what is the technical  
23 aspect related to platform integrity team  
24 concerning how Facebook ensured third parties' use  
25 of user data they acquired from Facebook was 03:43:41



HIGHLY CONFIDENTIAL

1 limited to the use case? 03:43:45

2 A. So there's a number of techniques that  
3 the platform integrity teams would have used to  
4 attempt to identify developers who were accessing  
5 or using data in -- in -- in different ways, in  
6 ways that was against policy.

03:44:04

7 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

14 Q. Was that a technology that was developed  
15 to ensure that a [REDACTED] at the URL  
16 provided?

03:44:52

17 A. Yes, that's technology that was developed  
18 to ensure that where a [REDACTED]

[REDACTED]  
[REDACTED]

03:45:09

21 Q. Did that tool evaluate the [REDACTED]  
[REDACTED] in any way?

23 A. My understanding is that that tool did

24 [REDACTED]

[REDACTED] in -- in place by -- by Facebook that

03:45:30

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HIGHLY CONFIDENTIAL

1 would evaluate the -- the [REDACTED] [REDACTED]

2 [REDACTED]

3 Q. Okay. So just focusing on that tool for  
4 the purpose of this question.

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED] is that -- is that accurate?

10 MR. SCHWING: Object to form. Incomplete 03:46:10  
11 hypothetical.

12 THE DEPONENT: My understanding is that  
13 that tool certainly would have said that a [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 Q. (By Mr. Melamed) Okay. Were each of the  
18 [REDACTED] on  
19 the platform evaluated by the -- by anyone at  
20 Facebook?

03:46:47

21 MR. SCHWING: Outside the scope of the  
22 deposition. Object to form.

23 THE DEPONENT: My understanding is that

24 [REDACTED]

[REDACTED] 03:47:04

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HIGHLY CONFIDENTIAL

1

2 [REDACTED] for and how they evaluated them is -- is

3 not -- not something I'm an expert in. I think

4 Ally Hendrix is probably best placed to talk about

5 how Facebook [REDACTED]

7 Q. (By Mr. Melamed) Okay. And just to be

8 clear, that is not -- the [REDACTED]

9 [REDACTED] is not the technical aspect

10 related to platform integrity team that you were

03:47:42

11 prepared to testify about today; is that right?

12 A. The example I've given here is about a

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED] -- by the operations teams and policy

17 teams at Facebook.

18 Q. What happened when Facebook determined

19 that [REDACTED] provided

20 by an app?

03:48:22

21 A. Different things would have happened

22 depending on what the app -- which app it was. If

23 it was an app where -- there was a partnerships

24 team at Facebook that was responsible for the

25 relationship with that developer, and typically the

03:48:42

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HIGHLY CONFIDENTIAL

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03:48:59

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03:50:12

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For other apps that may not have had a managed partner, the developer operations team would have or could have

I'm -- it likely depended on a number of factors.

Q. And are you prepared to testify today about those factors?

A. I can give you some but exactly which one would be applied would depend -- would have differed over time and a number of different factors.

Q. What are some that would have applied -- could have applied?

A. So one example is that Facebook

HIGHLY CONFIDENTIAL

1 Q. And what are other examples of -- of 03:50:16

2 [REDACTED] that could have been  
3 imposed if [REDACTED]

4 A. So other examples, again, of [REDACTED]  
5 that Facebook has employed as -- as our -- as part 03:50:28  
6 of our -- as here, [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 And then another example of a [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 As I said, exactly which [REDACTED]

13 [REDACTED]

14 [REDACTED] is

15 something the developer operations team and policy 03:51:02

16 team are best placed to -- to talk about. I can

17 give you examples of the -- the example -- the

18 [REDACTED] I'm aware of, having talked to the

19 people involved, but exactly which ones are applied

20 is -- is something that -- that -- that operations 03:51:17

21 and policy teams are best placed to -- to answer.

22 Q. Are there records at Facebook regarding

23 [REDACTED] by the

24 technology you described?

25 A. This technology will have -- would have 03:51:39

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HIGHLY CONFIDENTIAL

1 [REDACTED] 03:51:45

2 [REDACTED]

3 [REDACTED] in their -- existing for their  
4 application.

5 But the retention, you know, exactly 03:52:00

6 what's in those -- those logs and the -- the  
7 duration for which they've been retained is -- is,  
8 you know, something I can't -- I can't answer as --  
9 as we sit here today. But there would have been  
10 logs as part of the existence of the system, yes. 03:52:14

11 Q. Do you know what those logs were called?

12 A. They would have been tables relating to  
13 the name of the system in -- in Hive, most likely.  
14 But I -- I -- you know, I don't know the exact name  
15 of -- of the tables that were -- that were -- that 03:52:34  
16 were created to log this information.

17 Q. Does this technology that you described  
18 whereby Facebook would [REDACTED]

19 [REDACTED]

20 [REDACTED] 03:53:03  
21 does this technology still exist today?

22 MR. SCHWING: Object to form.

23 Q. (By Mr. Melamed) Can I just restate the  
24 end of that.

25 Does the technology describe -- is the 03:53:19

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## HIGHLY CONFIDENTIAL

1 technology you described still used by Facebook 03:53:21

2 today?

3 MR. SCHWING: Same objection.

4 THE DEPONENT: My understanding is that

5 that technology is still in place as part of our 03:53:31

6 efforts to [REDACTED]

■

8 Q. (By Mr. Melamed) And am I correct in

9 understanding that you do not know the name of the

10 table that records -- that logs the information 03:53:51

11 about apps that [REDACTED]

■

13 A. So in preparation for -- for today, I

14 spoke to, you know, people involved in -- in these

15 efforts about, in general, the techniques and tools 03:54:07

16 which are applied. This was one of the examples

17 that was -- you know, we talked about. You know,

18 so I have a high-level understanding of -- of that

19 system and its existence, but the precise name of

20 the table in -- in Hive, that's -- that's something 03:54:29

21 I'm afraid I don't have in my head today.

22 Q. And you mentioned -- you used the phrase

23 [REDACTED] but the tool automatically --

24 there's -- let me see if I'm describing this

25 correctly. 03:54:50

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HIGHLY CONFIDENTIAL

1 So Facebook wrote code -- engineers at 03:54:50

2 Facebook wrote code to determine [REDACTED]

3 [REDACTED]

4 [REDACTED] is that an

5 accurate statement of the -- of the way the tool 03:55:04

6 worked?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: That matches my high-level

9 understanding of -- of how this tool worked, yes.

10 Q. (By Mr. Melamed) Do you know what 03:55:17

11 qualified as a [REDACTED] in that context?

12 A. The system would likely have checked for

13 a number of things. For example, the -- whether or

14 not when we -- when [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 So that would be certainly one of the

18 things that that the system was checking for.

19 Q. Are you prepared to testify regarding

20 what constituted a [REDACTED] 03:55:56

21 [REDACTED]

22 A. So, again, I can give you my high-level

23 understanding of how the system works from -- from,

24 you know, talking to the -- to the people involved.

25 And in preparation for today, we talked about a 03:56:08

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1 large number of -- of different systems at -- at 03:56:13  
2 the company. So I can give my high-level  
3 understanding of how that -- of how that system  
4 worked.

5 My understanding is it would have 03:56:25

6 [REDACTED]  
[REDACTED]  
[REDACTED], in Facebook's estimation, as to  
9 whether or not that -- [REDACTED]

[REDACTED] 03:56:41

11 Q. Are you familiar with the use of the text  
12 lorem ipsum as placeholder text for when designing  
13 or writing a document?

14 A. Yes, I'm aware of the -- the practice of  
15 using lorem ipsum. 03:56:58

16 Q. Are you -- do you know whether the tool  
17 you're describing which [REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED] that had 03:57:23  
21 lorem ipsum placeholder text?

22 A. So the precise nature of how this system  
23 behaved is -- and whether or not it would have  
24 returned a valid document or not, determination  
25 in -- in that respect, is -- a level of detail I -- 03:57:48

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## HIGHLY CONFIDENTIAL

1 I -- I don't have in my head right now. So hard -- 03:57:52  
2 hard for me to answer that question in that level  
3 of specificity, I'm afraid.

4 Q. I'm -- I'm not trying to get you to  
5 testify beyond your knowledge. I'm just -- the 03:58:05  
6 indication we were provided is that you were  
7 prepared to talk about a technical aspect relating  
8 to platform integrity team, and you identified this  
9 as the technical act -- a technical aspect you were  
10 prepared to identify. So I'm just trying to 03:58:23  
11 understand the extent of your testimony.

12 MR. SCHWING: And, Matt -- and I want you  
13 to continue your questioning, so I'll be brief  
14 here.

15 Just for the record, we -- we did 03:58:31  
16 indicate in the letter that -- that he would  
17 generally speak to this issue to give you  
18 information on it with the idea that could then,  
19 you know, learn about it, if you need to ask other  
20 witnesses about it, et cetera. 03:58:44

21 But I want to make the record clear that  
22 we did use the word "generally," I believe.

23 Q. (By Mr. Melamed) Are there other  
24 technical aspects relating to the platform  
25 integrity team that you -- that you are prepared to 03:58:57

HIGHLY CONFIDENTIAL

1 testify about today concerning how Facebook ensured 03:59:00  
2 third parties' use of user data they acquired from  
3 Facebook was limited to the use case?

4 A. So another example of -- of a technique  
5 that the platform integrity team used was [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 So that's another -- another type of  
10 example. 03:59:39

11 Q. How were [REDACTED]  
12 [REDACTED] defined?

13 Let me restate that.

14 What constitutes an [REDACTED]

15 [REDACTED] 03:59:56

16 A. The answer to that is somewhat -- in the  
17 definition of the integrity teams, one of the  
18 challenges of working in -- in a -- in a space like  
19 this is the adversarial nature of it, and so some  
20 developers -- you know, what -- what is unusual or 04:00:21  
21 is considered unusual by the integrity team is a  
22 set of things that changes over time and will be  
23 different from context to context.

24 Typically and generally, though, what the  
25 team would be looking for is, for example, cases 04:00:37

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HIGHLY CONFIDENTIAL

1 [REDACTED] 04:00:42

2 [REDACTED]

3 [REDACTED]

4 [REDACTED].

5 So those are two examples of what might 04:00:58

6 be considered anomalous.

7 Q. What are the [REDACTED]

8 A. So in the context of the Graph API? Is

9 that what you mean by -- how would you like me to

10 answer generally in -- in -- can you help me 04:01:16

11 understand the kind of answer -- what kind of

12 answer you're expecting, generally or specifically

13 as it applies to the Graph API?

14 Q. In the context of the answer you just

15 provided, where you said that [REDACTED] 04:01:27

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 A. More that if an app [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 Q. Okay. Thank you for the clarification.

23 What did you mean by [REDACTED] in

24 that context?

25 A. So in that context, a [REDACTED] refers 04:02:05

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HIGHLY CONFIDENTIAL

1 to a -- [REDACTED] [REDACTED]

2 [REDACTED]

3 [REDACTED] The exact definition of that

4 is -- is -- will have changed over time, but at a

5 high level, that's -- that's what we mean by [REDACTED] [REDACTED]

6 [REDACTED]

7 Q. And who sets or establishes the [REDACTED]

8 [REDACTED]

9 A. The platform integrity team would likely

10 have been responsible for -- for -- for [REDACTED] [REDACTED]

11 [REDACTED] or being -- certainly being consulted

12 for how they were -- how they were set.

13 Q. And who at the platform integrity team

14 would you speak to to understand how [REDACTED]

15 were set over time at Facebook during the time 04:03:07

16 period of this case?

17 A. Given the -- the -- the time period of

18 the case is so wide, I would start by trying to

19 speak to somebody in the -- in the platform

20 integrity team today to see if they had more 04:03:29

21 information. I -- I have information and have a --

22 implemented at various times, but, you know, the --

23 the mechanism of [REDACTED] across -- across 15

24 years would have -- would have changed.

25 Q. And who would you reach out to today if 04:03:48

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HIGHLY CONFIDENTIAL

1 you wanted to talk -- on the platform integrity 04:03:50

2 team today if you wanted to talk about [REDACTED]

3 [REDACTED] over time?

4 A. I would start by reaching out to -- to

5 Dan Xu and see if he was able to answer the -- the 04:04:03

6 kind of specific questions that I'm -- you know,

7 beyond what I'm able to answer myself.

8 Q. Can you spell his last name, please.

9 A. That's X-U.

10 Q. You also noted that another [REDACTED] [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 A. Yes. And from speaking to the platform

14 integrity team, one thing that may have built --

15 has evolved over time is a system to look for [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED] for example.

18 Q. You mentioned that evolved over time,

19 correct?

20 A. My understanding, from talking to the 04:05:12

21 people involved, is that -- and as it would be

22 common in any adversarial space, as technology

23 evolves, the first versions might be relatively

24 simple and rules based, and -- and more

25 sophisticated ones might be -- you know, might 04:05:30

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## HIGHLY CONFIDENTIAL

1 be -- would have been developed over time -- for 04:05:34  
2 example, machine-based models and so on.

3 Q. Do you know when the first versions of --  
4 the first version of this tool was built by  
5 Facebook? I'm not speaking outside the context of 04:05:52  
6 this case.

7 A. Sure. This is one of the things that  
8 people have -- have -- when I've talked to the  
9 people involved in this, this is certainly  
10 something they -- they reference from around the -- 04:06:09  
11 in existence around the 2011, 2012 time frame. So  
12 my understanding is that such a system was in  
13 place, you know, even a basic one then. So that's  
14 the -- that's the kind of earliest example I've --  
15 I've -- I've heard about when talking to the people 04:06:31  
16 involved in preparation for today.

17 Q. How were the reports or notifications  
18 that there were [REDACTED]

[REDACTED]  
[REDACTED]  
20 what kind of [REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]

22 A. My understanding from -- again, from  
23 talking to the people involved is that one of the  
24 forms that that would have taken is -- is a  
25 [REDACTED] that -- that was made available to -- to 04:07:08

HIGHLY CONFIDENTIAL

1 [REDACTED] 04:07:11

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED] 04:07:32

6 Q. So putting this together, is it right to

7 say that around 2011 or 2012 -- and you're not

8 specific as to time period, but generally those --

9 those years -- there was [REDACTED]

10 [REDACTED] 04:07:49

11 [REDACTED]

12 [REDACTED]

13 A. Right. The -- the -- from my

14 understanding the -- yes, around -- around that

15 time, possible -- possibly later, the exact form 04:08:12

16 that that information would have taken would -- the

17 way in which it would have been made available to

18 DevOps may -- may have changed.

19 But, yes, the -- the -- there were --

20 there was a [REDACTED] 04:08:26

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 Q. Were there -- sorry. Let me withdraw

25 that. 04:08:42

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HIGHLY CONFIDENTIAL

1 Are there records that still exist of the 04:08:43  
2 [REDACTED]  
3 [REDACTED] starting in the 2011 or '12  
4 time period?  
5 MR. SCHWING: Object to form. 04:09:00  
6 THE DEPONENT: So my understanding is  
7 this -- this -- certainly logging from 2012  
8 onwards, as I understand it, [REDACTED]  
9 [REDACTED]  
10 So I know that that information has 04:09:21  
11 been -- has been stored and, in fact, made  
12 available in this case, as I understand it.  
13 It's -- it's possible that there is a way  
14 to reconstruct [REDACTED]  
15 [REDACTED] but again, 04:09:42  
16 exactly what Facebook's data retention policy is in  
17 this -- is -- is hard to that level of detail to  
18 know.  
19 So it may be possible to recreate [REDACTED]  
20 [REDACTED], but -- but I can't for certain -- I 04:09:56  
21 can't with certainty say that that would be  
22 possible today.  
23 Q. (By Mr. Melamed) You -- you mentioned  
24 from 2012 forward it's your understanding that  
25 information has been provided in this case 04:10:06

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HIGHLY CONFIDENTIAL

1 [REDACTED] [REDACTED]  
[REDACTED] [REDACTED], correct?  
3 A. That's correct, yeah.  
4 Q. What -- do you know what the name -- is  
5 there a name for that information or that table or 04:10:19  
6 whatever it is?  
7 A. I think I'm thinking of here is the [REDACTED]  
[REDACTED]  
[REDACTED]  
10 And I apologize, Rebecca, for making you 04:10:40  
11 have to write that down.  
12 Q. Okay. And have you heard that referred  
13 [REDACTED] just as a stand-alone  
14 two-word name without the underscores?  
15 A. I've heard that referred to as [REDACTED] [REDACTED]  
[REDACTED]  
17 Q. Is that your understanding of what is  
18 being referred to when people talk about [REDACTED]  
[REDACTED]  
20 A. That's my understanding of what's being 04:11:04  
21 referred to when people talk about [REDACTED]  
[REDACTED]  
23 Q. Going back to the -- the technology that  
24 exists to check [REDACTED]  
[REDACTED] 04:11:21

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HIGHLY CONFIDENTIAL

1 Do you recall talking about that? 04:11:24

2 A. Yeah, I recall talking about that.

3 Q. And there were some questions you weren't

4 able to answer about whether [REDACTED] -- what the

5 meaning of a [REDACTED] was, for example, 04:11:31

6 correct?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: The precise nature of how

9 that system determines [REDACTED]

10 [REDACTED] is a -- a level of detail I don't have right 04:11:42

11 now and will have changed over time.

12 Q. (By Mr. Melamed) Who would you talk to

13 to figure out how that had changed over time, how

14 what a [REDACTED] was had changed over time?

15 A. I would attempt to speak to somebody on 04:12:01

16 the platform integrity team to see if they could

17 answer a question with that level of specificity.

18 Q. And who would you go to now if you wanted

19 to start that inquiry?

20 A. I would start with Dan Xu. 04:12:15

21 Q. Are there other technical aspects

22 relating to the platform integrity team concerning

23 how Facebook ensured third parties' use of user

24 data that they acquired from Facebook was limited

25 to the use case that you are prepared to testify 04:12:34

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HIGHLY CONFIDENTIAL

1 about? 04:12:36

2 A. Another example that -- that I've learned  
3 about by preparing for this case is a system which

4 [REDACTED]

5 [REDACTED] 04:12:54

6 [REDACTED]

7 Q. Do you know when that technology was  
8 implemented?

9 A. So this activity has likely been done in  
10 some form for -- for quite some time. Early in 04:13:24  
11 its -- early in -- earlier in the gestation, this  
12 would have been a more manual process, and my  
13 understanding that since a -- an automated way of  
14 doing it is now -- is now in place.

15 And that's been developed more recently 04:13:44  
16 using [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 Q. When did that more automated process 04:14:02  
21 commence?

22 A. The precise date, I -- I don't have  
23 access to the precise date that -- that -- that  
24 that activity -- that that automated system came  
25 into being. From talking to the people involved, 04:14:19

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## HIGHLY CONFIDENTIAL

1 those systems were first implemented or how it 04:15:59  
2 operated over time. I've, you know, done the best  
3 job I can to prepare. I talked to a number of  
4 people who -- who were involved in these systems,  
5 but the precise dates in which they existed is -- 04:16:12  
6 is not something I have -- recall.

7 Q. Without precision, are you able to say  
8 about when the systems that you were prepared to  
9 testify about today started being used at Facebook?

10 A. The exact lineage of -- and when these 04:16:37  
11 systems came into being, like I -- I don't have the  
12 precise -- the precise timelines, I'm afraid. And  
13 as I say, I think these -- these systems overlap  
14 and, you know, were developed over a long period of  
15 time, and so hard to give very specifics about 04:16:56  
16 exactly what the behavior was and what the major  
17 milestones of evolution are.

18 Q. Do you know if the systems that are in  
19 place today were implemented after March 2018?

20 A. It's likely, given that there's a -- a 04:17:22  
21 team who works on this, that they've been  
22 constantly developing -- developing these kinds of  
23 systems. And so, yes, there -- there will be  
24 systems in place today that were not in operation  
25 around 2018. 04:17:39

HIGHLY CONFIDENTIAL

1 Q. You mentioned that there are [REDACTED] 04:17:46

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 A. The -- the -- it's likely there are 04:18:05

6 different -- different parts to the system that --

7 that [REDACTED]

8 [REDACTED] So hard -- again, like, I can talk

9 about these in -- high-level concept of what they

10 intend to do and -- and how they -- what their 04:18:23

11 functionality -- you know, how they are used.

12 The detail of the technical

13 implementation is something best left to an

14 engineer.

15 At a high level, [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED] [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 And then one of the other examples would

25 be [REDACTED] 04:19:12

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HIGHLY CONFIDENTIAL

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[REDACTED]

[REDACTED]

So pretty typical in an integrity context is the -- you know, the people using -- the people trying to develop bad apps are also trying to be not detected, and therefore the systems in place to detect them need to evolve over time in order to stay ahead of -- of those patterns in behavior.

04:19:30

So precisely how -- you know, how these systems are architected and whether or not -- which different pieces there are is, you know, a level of engineering detail. From -- from a product perspective, those are the -- the goals of the system and the types of things that those systems are looking for [REDACTED]

04:19:49

04:20:07

Q. To be clear, I'm not asking for engineering-level detail of how exactly how this happened. If I were to look for that information, who would I ask? Or if you were to look for that level of information, who would you reach out to?

04:20:24

A. Again, I would speak to one of the -- one of the engineers on the platform integrity team to understand, you know, that -- that level of specificity as to exactly how the systems are

04:20:45

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HIGHLY CONFIDENTIAL

1 implemented. 04:20:47

2 Q. Is there a particular person you would  
3 reach out to as being somebody you would start  
4 with?

5 A. I would start with Dan Xu again. 04:20:59

6 Q. Now, you mentioned, I think, three  
7 factors -- and I just want to make sure I have  
8 them -- that this tool would have looked at.

9 [REDACTED]  
10 [REDACTED] 04:21:14

11 [REDACTED]

12 Do I have that right?

13 A. Those are three examples I -- I  
14 mentioned. My understanding is that the -- the --  
15 there are likely more factors involved, and a 04:21:29

16 [REDACTED]

17 [REDACTED]

18 Q. Are you aware of any other factors as you  
19 sit here right now?

20 A. As I sit here right now, no. So I -- I 04:21:44  
21 can imagine some of what they might be, but I think  
22 that -- that would be speculating.

23 Q. Do you know when Facebook started looking  
24 at [REDACTED]

25 [REDACTED] 04:22:02

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HIGHLY CONFIDENTIAL

1 [REDACTED] 04:22:06

2 A. Yeah. Again, I talked to people involved

3 in -- in integrity who -- who were involved in a

4 number of ways of [REDACTED]

5 [REDACTED] [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED] in

8 around 2013, 2014, possibly earlier.

9 But that's when the people I -- I spoke

10 to talked about beginning to -- to perform that

04:22:45

11 kind of activity.

12 Q. Do you know who was involved in that

13 manual review that was happening around 2013, 2014

14 time period?

15 A. I don't know exactly who was involved. I

04:23:06

16 mean, platform integrity team changed over time,

17 too.

18 The -- there were people I spoke to

19 who -- who were involved in the platform integrity

20 team around that time.

04:23:23

21 Q. Who are those people?

22 A. So one name is Eugene Zarashaw.

23 Zarakhovsky was his previous name. So I think he

24 was -- he was involved.

25 Another person that was involved is

04:23:42

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HIGHLY CONFIDENTIAL

1 someone called Jonathan Gross. 04:23:45

2 And then the -- exactly how that

3 information is -- was -- was [REDACTED]

4 [REDACTED] is, again, I think a set of questions

5 for the developer ops and policy teams. I think 04:23:57

6 Ally Hendrix is -- is placed to answer those kinds

7 of questions.

8 Q. Do you know who led the development of

9 the [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

13 A. The specific name of the -- of the people

14 involved, no, I don't have -- you know, I don't

15 have their names. 04:24:29

16 As I've said, like this is a -- this is a

17 concept that -- that will -- that evolved over --

18 over time and, you know, in its earliest phases

19 would have been a [REDACTED]

[REDACTED] and today is -- is -- my 04:24:46

21 understanding is today is a much more -- more

22 [REDACTED]

23 I -- I -- I know the name of the -- of

24 the engineering manager involved more recently, so

25 I -- I, you know, I -- I recall meeting him 04:25:05

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## HIGHLY CONFIDENTIAL

1 recently to talk about this stuff. I can't think 04:25:11  
2 of his name right now. I think Jay is his first  
3 name, I think.

4 Q. If you remember that at any point during  
5 the deposition, just please stop and say, "I 04:25:24  
6 remember the name of the person."

7 A. I will. As -- as I've said, in order  
8 to -- to prepare for the broad topics to cover  
9 today, you know, I had to do a lot of prep across a  
10 number of areas. 04:25:41

11 Q. Are there other technical aspects  
12 relating to the platform integrity team concerning  
13 how Facebook ensured third parties' use of user  
14 data they acquired from Facebook was limited to the  
15 use case? 04:25:53

16 A. So another technique that I -- I'm aware  
17 has been employed is our [REDACTED]

[REDACTED]  
[REDACTED] So that's a --

20 another -- another common technique that -- that 04:26:29  
21 was employed, as I understand it, at various times.

22 Q. And just so we don't have to keep going  
23 back to the same question, I'd like to get out as  
24 many of these examples -- you know, this is  
25 something that you're here to testify about, so I 04:26:43

## HIGHLY CONFIDENTIAL

1 just want to get the list of the examples of 04:26:48  
2 technical aspects relating to the platform  
3 integrity team concerning how Facebook ensured  
4 third parties' use of user data they acquired from  
5 Facebook was limited to the use case. 04:26:57

6 So you just mentioned [REDACTED] and  
7 let's just try and list all of the other ways that  
8 you're aware of, if you can do that.

9 A. So another mechanism that is in place  
10 today is app review. And so app review is a 04:27:18  
11 mechanism by which Facebook asks developers to  
12 explain why they want access to a particular piece  
13 of information, and then Facebook uses technical  
14 means to determine whether or not they can, indeed,  
15 request that information from -- from users. So 04:27:43  
16 that's another example.

17 Q. Any other examples?

18 A. Another example of how Facebook attempted  
19 to ensure that information was not being  
20 inappropriately shared with fourth parties, in this 04:28:05  
21 case, people that the third-party developer had a  
22 relationship with, is [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

04:28:32

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3 Q. Are there any other technical aspects  
4 related to the platform integrity team concerning  
5 how Facebook ensured third parties' use of the data 04:28:49  
6 they acquired from Facebook was limited to use  
7 case.

15	So permissions is a mechanism, again, by	04:29:24
16	which Facebook attempts to ensure that information	
17	is only available to third parties within the	
18	context of a particular use case.	

19 Q. Let's go through these ones that you just  
20 listed. I just want to understand. Again, I'm not 04:29:43  
21 asking for the technical mechanisms by which they  
22 worked; I'm just asking for time period, general  
23 implementation.

24 So you mentioned first the [REDACTED]

[REDACTED] 04:29:58

HIGHLY CONFIDENTIAL

1 correct? 04:30:04

2 A. My understanding is that's a -- that's an  
3 activity that's been performed periodically.

4 Q. Starting about when?

5 A. I don't have the exact dates as to -- as 04:30:15

6 to when that activity was -- was done. Again, app

7 scoped user IDs began to be emitted in -- in

8 April 2014, and so after that is when it would have

9 been, you know, technically possible to --

10 you know, for -- for those [REDACTED] 04:30:36

11 [REDACTED]

12 Q. When you're talking about these

13 [REDACTED] are you talking about --

14 Have you heard the phrase "dark web"?

15 A. I have heard the phrase "dark web." 04:30:51

16 Q. Are you -- are you talking about data

17 made available by actors on the dark web?

18 A. My understanding from, you know, having

19 spoken to people involved in this is -- the

20 [REDACTED] 04:31:10

21 [REDACTED]

22 [REDACTED]

23 So it's not -- not just limited -- my understanding

24 is it's not just limited to -- to those sources.

25 Q. Your understanding is this -- this 04:31:26

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HIGHLY CONFIDENTIAL

1 necessarily only started after app scoped IDs were 04:31:28  
2 implemented.

3 But do you know about when this process  
4 actually started?

5 A. I don't have the precise dates as to -- 04:31:39  
6 as to -- as to when this -- this activity was --  
7 was done, no.

8 Q. And so far in your description you've  
9 mentioned that this is [REDACTED]

10 [REDACTED] 04:31:53

11 Do you know if there's been any effort to

12 [REDACTED]

13 A. My understanding is that the same efforts  
14 would have looked for [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 Q. Do you know whether this effort by the  
18 security teams [REDACTED]

19 [REDACTED]

20 [REDACTED] 04:32:41

21 A. I'm -- I'm -- I think -- yeah, I'm not  
22 aware of -- specifically if this activity was  
23 happening -- happening beforehand. It's -- it's --  
24 it's likely it was happening in some form, but I --  
25 I'd be speculating as to exactly what -- what was

04:33:13

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## HIGHLY CONFIDENTIAL

1 happening in the security teams. 04:33:17

2 Q. Let's move on to app review. You  
3 described the process whereby -- or can you  
4 describe briefly what app review is, and then you  
5 could also say when it started. 04:33:30

6 A. App review is a process by which Facebook  
7 requires app developers to request permission to  
8 use certain features which are known as "reviewable  
9 features" or request certain permissions which are  
10 known as "reviewable permissions" in their 04:33:56  
11 application.

12 Developers ask -- explain to Facebook why  
13 they want these features and why they want to  
14 request these permissions from users, and then  
15 Facebook determines whether or not, indeed, they 04:34:17  
16 can use those features and can request those  
17 permissions from users.

18 So that's the process of app review. And  
19 app review was instituted for new apps on  
20 April 30th, 2014. 04:34:32

21 Q. Did apps that existed prior to  
22 April 30th, 2014 ever go through app review?

23 A. Yes. The way app review was instituted  
24 is that the apps created for 2014 -- I'm sorry --  
25 April 30th, 2014 had to go through app review in 04:35:02

## HIGHLY CONFIDENTIAL

1 order to continue requesting the permissions they 04:35:09  
2 were requesting from users once they were upgraded  
3 to API v2.

4 Q. And who led -- who participated from  
5 Facebook in the app review process? 04:35:26

6 A. Can you help me understand what you mean  
7 by "participated in"? You mean developers --

8 Q. I'm sorry. That was an unclear question.

9 Who are the Facebook employees involved  
10 in approving or denying the requested permissions 04:35:43  
11 from an app?

12 A. Those would be members of the developer  
13 operations team.

14 Q. And was this an automated process or a  
15 manual process? 04:35:57

16 A. My understanding, app review is primarily  
17 a manual process.

18 Q. And how many -- I'm sorry. You said it  
19 started on April 30th, 2014; is that right?

20 A. App review was announced on April 04:36:20  
21 the 30th, 2014.

22 Q. When did app review start happening at  
23 Facebook? Was that on the same date or a different  
24 date?

25 A. My understanding is where Facebook began 04:36:33

## HIGHLY CONFIDENTIAL

1 to receive or was ready to receive app review 04:36:35

2 submissions on -- on the same date.

3 Q. Do you know how many people were on the  
4 team responsible for conducting app review on -- in  
5 April of 2014? 04:36:53

6 A. The precise number of people on the  
7 developer operations team, I -- I don't have that  
8 information. You know, I don't have that  
9 information at hand.

10 Q. Do you know roughly how many people were 04:37:07  
11 on that team in 2014?

12 A. I think the questions around DevOps  
13 and -- and app review are best asked to Ally  
14 Hendrix. She was -- she was much more closely  
15 involved in the actual operation of this -- of this 04:37:23  
16 program.

17 I can speak to, again, the technical  
18 aspects by which it was implemented and how it  
19 worked. I think in terms of operation and the way  
20 decisions were made and who was responsible for 04:37:34  
21 making those decisions, I think Ally is the best  
22 person to give you that information.

23 Q. And this is implied by your answer, but I  
24 just want to be clear. Are you able to provide  
25 that answer? 04:37:47

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1 MR. SCHWING: Object to form. 04:37:48

2 THE DEPONENT: You mean an answer to the  
3 number of people who were on the -- the developer  
4 operations team in 2014?

5 Q. (By Mr. Melamed) Correct. Can you 04:38:00  
6 provide an approximate number of people on the  
7 developer operations team in 2014?

8 A. I -- I think it's likely the order of  
9 [REDACTED], but I'm -- I'm not -- like  
10 I'm not confident in -- in that answer. 04:38:21

11 My role at the time was to build out the  
12 technical infrastructure and even developer-facing  
13 infrastructure for -- for how this was enacted and  
14 implemented. As I say, I think Ally is the -- is  
15 likely the best person to give you information 04:38:38  
16 on -- on how it was instituted and operated from a  
17 operations perspective.

18 Q. Another technical aspect relating to  
19 platform integrity team concerning how Facebook  
20 ensure third parties' use of user data they 04:38:53  
21 acquired from Facebook was limited to use case that  
22 you mentioned is [REDACTED]

[REDACTED]  
[REDACTED]

25 Is that -- did I get that right? 04:39:12

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1 A. Yes, that's pretty -- pretty close, yes. 04:39:16

2 Q. Was that an automated or a manual  
3 process?

4 A. My understanding is the [REDACTED]

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 Q. Do you know when that process started,  
10 when Facebook started using the process? 04:39:54

11 A. My understanding is that that was  
12 something built around 2011 or 2012.

13 Q. Do you know who was responsible for  
14 building it around 2011 or 2012?

15 A. The platform integrity team were 04:40:22  
16 responsible for -- for building that as -- as --  
17 as, you know, it pertains to exactly their -- their  
18 scope, making sure the information is -- is  
19 appropriately shared with third parties and so on.

20 So I -- I know that they were the team 04:40:39  
21 responsible for -- for building it.

22 Q. Do you know if records exist of the

23 [REDACTED]

24 [REDACTED]

25 [REDACTED]

04:41:03

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1 [REDACTED] 04:41:07

2 A. This system would have [REDACTED]

3 [REDACTED]

4 [REDACTED] whether or not that

5 information has been retained, you know, eight or 04:41:25

6 so years later, Facebook standard data retention

7 policies, you know, are shorter than that.

8 So it's possible that information has

9 been retained. I wouldn't know, I'm afraid.

10 Q. Does that effort continue today, the 04:41:45

11 automated effort to look for such information?

12 A. My understanding is technical changes

13 [REDACTED]

14 [REDACTED] that means

15 that -- that detection is no longer needed. 04:42:04

16 Q. Do you know when those technical changes

17 were made such that Facebook determined the

18 detection was no longer needed?

19 A. I want to say those -- those changes were

20 roughly made in 2013, '14. But, again, that's -- 04:42:22

21 that's my understanding of the rough timelines.

22 Q. When these -- this [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 04:42:48

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1 [REDACTED] 04:42:52

2 A. I -- I am afraid the precise nature in  
3 which that tool operated ten years ago, I have a  
4 high-level understanding, which is that [REDACTED]

5 [REDACTED] 04:43:10

6 [REDACTED]

7 Whether or not that tool [REDACTED]

8 [REDACTED]

9 detail, I -- I can't answer, I'm afraid.

10 MR. SCHWING: Matt, we've been going for 04:43:30

11 a while now. I understand you're kind of working  
12 on a -- you know, a bit of the topic here, but I  
13 wanted to check in with Mr. Cross to make sure  
14 he's -- how he's doing, if he needs a break, and  
15 kind of, you know, think about when we're going to  
16 stop for our next break.

17 THE WITNESS: Yeah, I'd appreciate a bio  
18 break, if that's -- if that's possible.

19 MR. MELAMED: That is. I just wanted to  
20 follow up with a question about permissions, which 04:43:53

21 you had mentioned as, I think, the last of these  
22 techniques. If we can finish those questions now  
23 before the break, that would be great. If not, if  
24 you need the break, I can return to it after. It's  
25 up to you. 04:44:05

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1 THE DEPONENT: I'll take a break now, if 04:44:06  
2 that's okay.

3 MR. MELAMED: Okay.

4 THE DEPONENT: And then come back to that  
5 question. 04:44:12

6 MR. MELAMED: Okay. We can go off the  
7 record.

8 THE VIDEOGRAPHER: Okay. We're off the  
9 record at 4:44 p.m.

10 (Recess taken.) 04:44:17

11 THE VIDEOGRAPHER: We're back on the  
12 record. It's 4:57 p.m.

13 Q. (By Mr. Melamed) Mr. Cross, the last of  
14 the techniques we were talking about related to the  
15 technical aspects of how the -- how platform 04:57:29  
16 integrity team ensured third parties' use of user  
17 data they acquired from Facebook was limited to the  
18 use case or permissions.

19 Do you remember that?

20 A. Accessing permissions, yeah. 04:57:46

21 Q. When were permissions implemented?

22 A. Permissions as we -- as they're known  
23 today were first introduced in May 2010.

24 Q. And what do you mean by "known today"?

25 A. So these are permissions in the -- in the 04:58:13

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1 sense that these are things that developers can 04:58:14  
2 request from users and then once the user is  
3 granted those permissions, then the app has access  
4 to information that are covered by the permissions  
5 that the users have granted to the application. 04:58:31

6 Q. And how did those permissions relate to  
7 the use case of the app?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: So a permission would gain  
10 a particular piece of information or set of 04:58:51  
11 information that an app could have access to, and  
12 typically those permissions would be requested by  
13 the developer based on the -- on the functionality  
14 their app was trying to perform.

15 Q. (By Mr. Melamed) The permissions were 04:59:18  
16 requested by the developer, correct?

17 A. The permissions were requested -- well --  
18 when permissions were first introduced, developers  
19 requested them from users. After the institution  
20 of app review, an app was required to go through an 04:59:35  
21 app review, then the developer would be required to  
22 request those permissions from user -- from  
23 Facebook, and if Facebook granted the permission,  
24 then the app could request those permissions from  
25 users. 04:59:53

## HIGHLY CONFIDENTIAL

1 Q. I know you testified about this before. 04:59:54

2 I just want to make sure I have it in the right  
3 place.

4 App review, the process of app review,  
5 started on April 30th, 2014, correct? 05:00:02

6 A. That's correct.

7 Q. So prior to April 30th, 2014, permissions  
8 were requested by an app -- I'm sorry -- by a  
9 developer, and the request was made to -- directly  
10 to a user; is that correct? 05:00:18

11 A. That's correct.

12 Q. Was -- did Facebook do anything prior to  
13 April 30th, 2014, to check whether developers were  
14 requesting permissions from users for data that  
15 went beyond the developer's use case? 05:00:36

16 MR. SCHWING: Object to form. Outside  
17 the scope.

18 THE DEPONENT: So one example here is  
19 their publishing permissions. One of the  
20 permissions that exists -- existed -- apologies -- 05:00:53  
21 in the API is the ability for apps to publish  
22 content back to Facebook on behalf of the user.

23 And the platform integrity team would  
24 have looked at or did look at the information being  
25 published by apps on behalf of the users and 05:01:15

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1 whether or not -- attempt to determine whether or 05:01:22  
2 not the information being shared back to Facebook  
3 was being done in a way that was compliant with  
4 Facebook's policies around sharing stories back to  
5 Facebook. 05:01:40

6 Q. (By Mr. Melamed) Let me ask a more -- a  
7 narrower version of the question I just asked. And  
8 I'm attempting to eliminate with this question  
9 sharing back from the developer or the app to  
10 Facebook. 05:01:54

11 In terms of the permissions sought by a  
12 developer for an app from a user before  
13 April 30th, 2014, did Facebook review any of the  
14 permissions to determine whether the information  
15 the developer was asking for was within the app's 05:02:20  
16 use case?

17 MR. SCHWING: Outside the scope. Object  
18 to form.

19 THE DEPONENT: Again, I think the -- in  
20 terms of [REDACTED] 05:02:36

21 [REDACTED]

22 [REDACTED]

23 The assessment of that would have been,  
24 at that time, done by primarily the developer  
25 operations and policy teams. 05:03:00

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1 Q. (By Mr. Melamed) What were the 05:03:03  
2 operational processes in place at that time? And  
3 by "that time," I mean prior to April 30th, 2014.

4 MR. SCHWING: Outside the scope of the  
5 deposition. Object to form. 05:03:13

6 THE DEPONENT: I think the operation --  
7 like Ally Hendrix is the best person to answer  
8 questions around the operational processes in place  
9 and the policies there.

10 The platform engineering teams would have 05:03:28

11 [REDACTED]

12 [REDACTED]

13 Q. (By Mr. Melamed) Just to be clear about  
14 it, so I am clear about the testimony you are  
15 giving. 05:03:43

16 You were identified as somebody who could  
17 talk about the technical aspect related to platform  
18 integrity team concerning how Facebook ensured  
19 third parties' use of user data they acquired from  
20 Facebook was limited to the use case; is that 05:03:56  
21 right?

22 Do you understand that as well?

23 A. I understand. That's right.

24 MR. SCHWING: Subject to the -- Matt,  
25 subject to the clarifications that we've indicated 05:04:08

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1 in our correspondence. 05:04:11

2 But go ahead. Please go ahead and ask  
3 your question.

4 Q. (By Mr. Melamed) Okay. So the follow-up  
5 to that is is it accurate that there were no 05:04:16  
6 technical aspects relating to the platform  
7 integrity team concerning how Facebook ensured  
8 third parties' use of user data they acquired from  
9 Facebook was limited to the use case in the context  
10 of permissions before April 30th, 2014? 05:04:35

11 MR. SCHWING: Object to form.

12 THE DEPONENT: My -- my goal here is to  
13 give you examples of what was done, and in attempt  
14 to do that, I spoke -- I've spoken to people  
15 involved in this over -- over periods of time, and 05:05:00  
16 I think I've given several examples of how the  
17 platform integrity team operated and the things  
18 they did. It's possible they did other things that  
19 I am not aware of, that I was unable to uncover in  
20 my preparation for today. 05:05:21

21 So I don't think I can rule out other  
22 things were done. It's possible other things were  
23 done that I'm -- I'm not aware of. My job -- my  
24 job here is to do the best job I can giving you  
25 examples of things that were -- that were done that 05:05:38

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1 were relayed to me as part of my preparation for 05:05:40  
2 today.

3 Q. (By Mr. Melamed) Let me restate the  
4 question, then, based on that answer.

5 Are you aware of any technical aspects 05:05:50  
6 relating to the platform integrity team concerning  
7 how Facebook ensured third parties' use of user  
8 data they acquired from Facebook was limited to the  
9 use case in the context of permissions prior to  
10 April 30th, 2014? 05:06:06

11 A. In the context of permissions  
12 specifically and the technical aspects, I'm -- I'm  
13 not aware of anything more than the examples I've  
14 already given, which -- which were in place at --  
15 to prevent and detect misuse of information. 05:06:30

16 Q. What were the examples you've already  
17 given concerning permissions that were in place to  
18 prevent and detect misuse of information prior to  
19 April 30th, 2014?

20 MR. SCHWING: Object to form. 05:06:55

21 THE DEPONENT: We talked about the  
22 existence of the permissions and then the  
23 institution of -- of app review as examples. So  
24 that's what I'm referring to.

25 Q. (By Mr. Melamed) And the existence of 05:07:13

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1 app review commenced on April 30th, 2014, right? 05:07:17

2 A. App review commenced on April 30th, 2014,  
3 yes.

4 Q. And so in the context of this line of  
5 inquiry of topic 2d, the technical aspect related 05:07:41

6 to platform integrity team concerning how Facebook  
7 ensured third parties use of user data they  
8 acquired from Facebook was limited to use case, we  
9 just talked about a series of technical -- of  
10 technical aspects that Facebook used, correct? 05:07:59

11 I'm not trying -- this isn't a "gotcha."  
12 I'm just trying to go back over what we talked  
13 about a little bit.

14 A. Yes, we talked through a number of  
15 techniques that -- that Facebook used over time to 05:08:10  
16 assess how developers were using information.

17 Q. And for some of them, you were unable to  
18 state the specific -- the specific time period when  
19 those technical aspects were in place, right?

20 A. I've given -- I've given some dates as 05:08:32  
21 much as I can, so I feel I've given the best job --  
22 given some reasonable clarity on that.

23 Q. And then for some of them you were unable  
24 to talk about the specific way the technology  
25 worked to ensure that third parties' use of user 05:08:51

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1 data acquired from Facebook was limited to use 05:08:58

2 case; is that right?

3 MR. SCHWING: Object to form.

4 THE DEPONENT: To be able to give a

5 general overview of -- of several systems that -- 05:09:10

6 that have been in place. So, yes.

7 Q. (By Mr. Melamed) I just want to read for

8 the record the representation that was made by

9 counsel before talking to you about this subject.

10 MR. MELAMED: And I'm not doing this to 05:09:29

11 start a fight, Austin. You know, obviously you can

12 respond.

13 But the paragraph that was in the letter

14 written on June 3rd specifically regarding your

15 preparation to testify was with respect to topic 05:09:41

16 2d, which relates to "how Facebook ensured third

17 parties' use of such data or information was

18 limited to the use case." For avoidance of doubt,

19 Facebook again writes that "while Ally Hendrix is

20 prepared to testify on most aspects of topic 2d, 05:09:59

21 there is a technical aspect relating to the

22 platform integrity team that Mr. Cross is prepared

23 to testify about. We are uncertain why you are

24 pushing back on this issue. As mentioned above,

25 Facebook is simply using its best efforts to 05:10:11

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1 identify the best possible witnesses to testify on 05:10:14  
2 plaintiffs' topics."

3 So I just want to state for the record  
4 that that's why we were pushing on these topics.  
5 That's why I've asked the follow-ups that I asked. 05:10:23  
6 And we will seek additional testimony regarding  
7 these topics so that we get the answers to those  
8 questions.

9 MR. SCHWING: And, Matt, I will not argue  
10 with you, and I'm happy to address that, you know, 05:10:39  
11 at -- at an appropriate time. We've indicated in  
12 correspondence that Mr. Cross will be prepared to  
13 discuss -- and I'm quoting -- "generally the steps  
14 the platform integrity team undertook to detect  
15 misuse." You're, of course, free to follow up with 05:10:58  
16 further discovery.

17 I appreciate you raising your concerns.  
18 I'm happy to speak with you about it and -- and --  
19 and work through the issues.

20 MR. MELAMED: Thank you. I just -- I 05:11:12  
21 appreciate that. I just want to note that the word  
22 "generally" is not in the -- uttered in the  
23 reference.

24 SPECIAL MASTER GARRIE: This is Special  
25 Master Garrie. Both parties have been heard. 05:11:21

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1 Let's move forward. 05:11:23

2 MR. SCHWING: Thank you, Special Master.

3 I appreciate it.

4 MR. MELAMED: Thank you.

5 Q. (By Mr. Melamed) So I'm going to return 05:11:29

6 to the ways that Facebook made user data available

7 to third parties. We talked a little bit about

8 Graph API and you -- you talked a little about rest

9 API. I just want go all the ways and make sure I

10 understand the time periods and the differences in 05:11:44

11 the way information was made available.

12 So I want to know as a general matter,

13 starting what are the ways that third parties --

14 again, excepting advertisers and data brokers --

15 could access user data from Facebook from 2007 to 05:12:05

16 the present?

17 A. Sure. Happy -- happy to go into that.

18 So 2007, my understanding is there was an

19 API called the "rest API," which allowed developers

20 to query Facebook's database for user information. 05:12:30

21 And that was the primary way in which developers

22 queried the Facebook -- queried Facebook for user

23 data up until launch of the Graph API in

24 April 2010.

25 Q. And for the rest -- I'm sorry. I didn't 05:12:53

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## HIGHLY CONFIDENTIAL

1 mean to interrupt you. I want to ask some 05:12:55

2 follow-ups about rest API while we're here.

3 Were those queries submitted in FQL?

4 A. No. I was going to go on to FQL.

5 FQL is another mechanism by which 05:13:13

6 developers can query or could query Facebook for

7 user data. At a technical level, you would make an

8 X -- a rest API call to the FQL method and specify

9 your FQL statement in your API request.

10 Similarly, when the Graph API was 05:13:38

11 launched, you would be able to access the FQL

12 method on the Graph API and specify your FQL query,

13 and then in both cases, a response to your FQL

14 query would be returned.

15 Q. Did Facebook -- I'm sorry -- third 05:14:03

16 parties, using FQL queries, could batch multiple

17 queries into a single call, correct?

18 A. I -- I think yes. Facebook -- the -- the

19 FQL allowed you to request -- well, more

20 specifically, I -- I'm certain that Facebook -- FQL 05:14:25

21 allowed you to ask for multiple pieces of

22 information in your API requests. I can't say for

23 certain whether or not you could submit multiple

24 FQL requests, so I'm not sure about that detail.

25 But you could certainly ask for multiple pieces of 05:14:46

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1 information as part of the FQL query. 05:14:49

2 Q. Was the same true for rest API?

3 A. When you say "the same," do you mean --

4 refer -- sorry. Can you just clarify what you mean

5 by "the same true." 05:15:06

6 Q. Sure.

7 Would third parties ask for multiple

8 pieces of information in the same call to the rest

9 API?

10 A. No. My understanding is that the rest 05:15:26

11 API, you would call one -- you would make one API

12 call at a time.

13 Q. And you said rest API was used between

14 2007 and 2010, correct?

15 A. My understanding is it was instituted 05:15:42

16 in -- in 2007. The Graph API came to -- was

17 announced in April of 2010 and was designed to

18 replace it over time.

19 Q. Do you know when third parties were no

20 longer able to make calls via a rest API? 05:15:59

21 A. The deprecation of the rest API was

22 announced, I think, in v2.1 or v2.3. The precise

23 date on which it was later published and

24 deprecated, I -- I don't have in my head or my

25 notes today. I -- I can access that for you. 05:16:25

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1 Q. When you're talking about -- when you 05:16:30  
2 mentioned the deprecation of rest API being  
3 announced, what you believe it was either 2.1 or  
4 2.3, are you referring to Graph v2.1 or Graph v2.3?

5 A. Sorry. Yes, that's true. The 05:16:47  
6 announcement of the deprecation of the rest API and  
7 FQL was announced at the same time as one of those  
8 API versions. Again, I think that's -- that's  
9 right, but we can follow up with the specific  
10 dates. 05:17:06

11 Q. And then once the deprecating of rest API  
12 and FQL was announced, is it accurate that certain  
13 third parties were still able to make calls on user  
14 data via those methodologies for a period of time?

15 MR. SCHWING: Object to form. 05:17:26

16 THE DEPONENT: Yes, the -- the FQL and  
17 the rest API were then later removed from the  
18 public APIs of this area. Some apps retained  
19 access to those mechanisms for -- for a longer  
20 period of time because those apps were -- were hard 05:17:48  
21 or hadn't been yet updated to call a Graph API.

22 Q. (By Mr. Melamed) Do you know when the  
23 last apps were no longer accessing FQL mechanism  
24 for calling user data?

25 A. I -- I discussed that -- I discussed that 05:18:18

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1 date with -- with folks. I don't have the precise 05:18:19  
2 date to hand, but that's something we could -- we  
3 could follow up on if needed.

4 Q. I just want to understand your answer,  
5 though. You asked that question of people you 05:18:32  
6 spoke in preparation for today and were not able to  
7 determine in those conversations the exact date?

8 A. No. My understanding is that the exact  
9 date is determinable. I don't have it in my head  
10 or in my notes right now. 05:18:49

11 Q. And is the -- is your answer the same for  
12 rest API?

13 A. Yes, my understanding is those -- those  
14 two were treated broadly together as legacy  
15 mechanisms for accessing information. 05:19:10

16 Q. Do you know how many apps called user  
17 information via the FQL methodology, just as a  
18 rough number?

19 A. Can you help me understand -- over what  
20 period of time. In the past? I guess -- I'm 05:19:32  
21 sorry. I don't understand.

22 Q. I'll restate the question.

23 During the period of time apps could  
24 query user data using FQL, do you know how many  
25 apps did so? 05:19:49

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1           A.    FQL was one of the more advanced ways to           05:19:56  
2           access user data, and so it was my -- my  
3           understanding is it was always [REDACTED]

4           [REDACTED]  
5           Q.    And is it accurate to say that those apps           05:20:16  
6           were the more advanced apps that were using  
7           platform at that time?

8           MR. SCHWING:   Object to form.

9           THE DEPONENT:   It's not accurate to say  
10          that they were necessarily the most advanced apps.           05:20:28

11          FQL was -- was just a way developers could choose  
12          at the time to -- to query Facebook for  
13          information, and some chose to make FQL queries and  
14          others would have chosen to use the predefined  
15          methods that the API provided.   And typically FQL           05:20:50  
16          existed to allow developers to -- to query  
17          different --

18          Let me put it the other way.   Sorry.

19          Standard API methods existed to cover the  
20          most common use cases.   So it was more about the           05:21:06  
21          technical abilities of the developer rather than  
22          the app being, you know, more advanced in terms of  
23          such an answer.

24          Q.    (By Mr. Melamed)   Does Facebook have a  
25          record of which developers queried for user data           05:21:23

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1 using FQL? 05:21:28

2 A. My understanding is that the [REDACTED]  
3 contained information about apps querying FQL on  
4 the Graph API.

5 Q. Was Facebook able to determine which 05:21:57  
6 types of information were requested by each FQL  
7 call?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: In order to process the  
10 query, [REDACTED] 05:22:14

11 [REDACTED]  
12 Q. (By Mr. Melamed) Did Facebook record  
13 each type of information requested in FQL calls?  
14 Is there a log of each type -- was there a log of  
15 each type of information requested by FQL calls? 05:22:38

16 MR. SCHWING: Compound. Vague.

17 THE DEPONENT: The -- the fact that --  
18 I'm aware that the fact that an API -- that an app  
19 made an FQL call would [REDACTED]

20 there -- what I'm saying is that in the past there 05:23:08  
21 was a way to unpack which the -- the FQL calls  
22 being made. But I'm -- I'm uncertain [REDACTED]

23 [REDACTED]  
24 Q. (By Mr. Melamed) I just want to restate  
25 that to make sure I understand it. And please 05:23:32

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1 correct me if I'm getting this wrong. 05:23:35

2 So we're starting from the premise that a  
3 single FQL call could pass for multiple types of  
4 information, right?

5 A. An FQL call allowed a developer to 05:23:50  
6 request different fields on an object and join  
7 those together.

8 Q. And that's in a single call, correct?

9 A. Yes. An FQL call would allow a developer  
10 to -- to request multiple types of information in a 05:24:06  
11 single call.

12 Q. And Facebook obviously understood enough  
13 about the individual types of information in  
14 requested -- in a single call to be able to return  
15 those individual types of information, correct? 05:24:20

16 A. [REDACTED]  
[REDACTED]  
[REDACTED]

19 Q. And I think you answered this, but I'm  
20 going to ask it as a question again just to make 05:24:38  
21 sure I understand correctly.

22 Did Facebook log the individual types of  
23 information it provided in response to FQL queries?

24 MR. SCHWING: Object to form.

25 THE DEPONENT: My understanding is that 05:24:59

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1 [REDACTED] -- similar to the Graph API, 05:25:00

2 [REDACTED]

3 [REDACTED]

4 Q. (By Mr. Melamed) Did Facebook log the  
5 individual types of information requested in a 05:25:14  
6 single FQL query?

7 A. My understanding is that it's [REDACTED]  
8 [REDACTED]  
9 The retention of that information is -- is -- is,  
10 you know, not known to me, and -- but from that, it 05:25:41

11 [REDACTED]

12 [REDACTED]

13 Q. You do not know whether Facebook, in  
14 fact, logged each type of information requested in  
15 FQL call? 05:26:18

16 MR. SCHWING: Object to form.

17 THE DEPONENT: The -- my answer is -- my  
18 understanding is Facebook [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 Q. (By Mr. Melamed) Do you know whether  
23 Facebook had logs that broke out each type of  
24 information requested in FQL queries?

25 MR. SCHWING: Objection. Vague. 05:26:59

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## HIGHLY CONFIDENTIAL

1 THE DEPONENT: I've spoken to people, 05:27:07  
2 again, involved in API logging over time, and the  
3 type of information exposed by FQL, as I -- as I  
4 say, is -- [REDACTED]

5 [REDACTED]. In order to specify 05:27:25  
6 an FQL query, the developer has to be very specific  
7 about the information they want in that -- in that  
8 API call. [REDACTED]

9 [REDACTED]  
10 [REDACTED] 05:27:46

11 Q. (By Mr. Melamed) Does Facebook have a  
12 log of the FQL queries that were made for users'  
13 data?

14 MR. SCHWING: Asked and answered.

15 THE DEPONENT: As I say, I -- I 05:28:03  
16 understand that [REDACTED]

17 [REDACTED] Whether or not Facebook has access -- has  
18 those logs today and has access to that  
19 information, I -- I can't say as I sit here today,  
20 I'm afraid. 05:28:19

21 Q. (By Mr. Melamed) Does Facebook have a  
22 log of the user information that was requested via  
23 the rest API?

24 A. Are you asking whether or not Facebook  
25 has -- has that today? 05:28:41

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1 Q. Yes. 05:28:43

2 A. Once again, that information [REDACTED]  
3 [REDACTED], but you're asking a  
4 question about Facebook's data retention policies  
5 from -- from a set of data that -- from several 05:28:58  
6 years ago. I -- I can't say for certain whether or  
7 not Facebook has that data today.

8 Q. And just to be clear, I'm not asking  
9 about the retention policies, but I understand  
10 there's an overlap in these questions. I'm asking 05:29:13  
11 about the -- one of the topics on which you've been  
12 designated is how Facebook tracked information,  
13 right. Information was provided to third parties.  
14 And so I think this falls within that topic.

15 I understand your -- I understand your 05:29:30  
16 answer. I'm just trying to be clear about where  
17 these questions are coming from.

18 Do you know whether Facebook had at any  
19 time the information about which users' data was  
20 accessed via FQL queries? 05:29:55

21 MR. SCHWING: Vague.

22 THE DEPONENT: My understanding is that  
23 Facebook [REDACTED] -- which is  
24 what would have been required to answer that  
25 question. 05:30:21

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) Do you know whether 05:30:21  
2 Facebook at any time had information on which  
3 users' data was requested via FQL queries?

4 MR. SCHWING: Asked and answered.

5 I'm sorry, Matt. I don't want to 05:30:38  
6 interrupt you. You already asked about FQL. Do  
7 you mean FQL or do you mean rest?

8 MR. MELAMED: I mean FQL.

9 MR. SCHWING: Sorry. Go ahead.

10 THE DEPONENT: I -- he -- I'm going to 05:31:06  
11 try to give you the best answer I can for how FQL  
12 worked. It's been a long time since I've used it  
13 myself.

14 [REDACTED] Generally my understanding of  
15 [REDACTED] at the time is that they 05:31:25

16 [REDACTED] and not necessarily

17 [REDACTED]

18 It's -- it's possible the -- that [REDACTED]

19 [REDACTED] but that

20 would require me to understand the detail of a -- 05:31:57  
21 of a logging table from several years ago.

22 So I -- I'm not sure I can completely  
23 answer that question, I'm afraid.

24 Q. (By Mr. Melamed) Is there a point at  
25 which Facebook did log the identity of individual 05:32:15

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1 users whose information was requested by a third 05:32:25  
2 party?

3 MR. SCHWING: Objection. Vague.

4 THE DEPONENT: I can't for certain,

5 but -- but my understanding is that the [REDACTED] [REDACTED]

6 [REDACTED] may have included the [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 Q. (By Mr. Melamed) That's the method

10 table, speaking -- "colloquially" is the wrong 05:33:12

11 word. But are you describing the [REDACTED]

12 A. No. I'm describing the -- [REDACTED]

13 [REDACTED]

14 in which we have [REDACTED]

15 [REDACTED] 05:33:35

16 Q. Do you know what the names of those

17 tables are, the specific names?

18 A. There are two tables I can -- I can

19 recall, [REDACTED]

20 Q. Are you aware of information -- sorry. 05:34:01

21 Let me withdraw that and restate it.

22 Are you aware of any other tables or

23 records within Facebook's possession that identify

24 individual users whose data has been requested by a

25 third party? 05:34:20

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1 MR. SCHWING: Objection. Vague. 05:34:25

2 THE DEPONENT: My understanding is a  
3 previous version of those tables called [REDACTED]  
4 They later were split into -- into two tables. But  
5 that's the system I'm aware of that [REDACTED] [REDACTED]

6 [REDACTED]  
7 Q. (By Mr. Melamed) Are you aware of any  
8 other system that identified -- that identified API  
9 calls where those calls can be tracked to an  
10 individual user? 05:35:06

11 A. When you say "tracked" -- can I just  
12 clarify what you mean by "tracked to an individual  
13 user."

14 Q. Sure.

15 Let me describe what I'm asking for in 05:35:17  
16 term of a table, right. Would there be any table  
17 that said X app, meaning this API call on this user  
18 ID's information or this replacement user ID's  
19 information or some other identifier describing  
20 identifying an individual whose -- whose 05:35:45  
21 information that a call was being made against.

22 Does that help clarify?

23 MR. SCHWING: Object to form.

24 THE DEPONENT: The -- my -- my  
25 understanding of the way [REDACTED] 05:36:00

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1 [REDACTED] [REDACTED]  
[REDACTED] [REDACTED], so in  
3 this case, it's the [REDACTED]  
[REDACTED] rather than the -- the  
5 [REDACTED] 05:36:29

6 So the example here would be the  
7 system would -- again, as I understand it from  
8 talking to the people involved -- when you had  
9 [REDACTED]  
[REDACTED] and the [REDACTED] [REDACTED]  
[REDACTED] and  
12 therefore your [REDACTED] Not necessarily the -- the  
13 [REDACTED]

14 Q. (By Mr. Melamed) So if I had logged in  
15 to an app and the app was permitted to call my 05:37:17  
16 friend's religious and political preferences, and  
17 the app made a call on that data for my friends, am  
18 I understanding correctly that the records that  
19 they Facebook kept would identify me as having  
20 requested that information via my access token, but 05:37:49  
21 not the individuals whose data was returned as a  
22 result of that request? Or I'm sorry -- who has  
23 request access -- who --

24 Let me restate this whole thing. I'm  
25 going to reread most of it. I'm sorry. I 05:38:05

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1 understand that Facebook didn't have the records of 05:38:07  
2 whose data was returned.

3 So starting again. If I had logged in to  
4 an app and the app was permitted to call my  
5 friend's religious and political preferences and 05:38:17  
6 the app made a call on that data for my friends, do  
7 I understand correctly that the records Facebook  
8 kept would identify me as having requested that  
9 information, but not the friends whose information  
10 was requested? 05:38:37

11 MR. SCHWING: Object to form.

12 THE DEPONENT: My understanding of the  
13 [REDACTED] is that it  
14 would record the [REDACTED]  
15 [REDACTED] and -- and not necessarily [REDACTED] 05:38:56  
16 of the [REDACTED]

17 Q. (By Mr. Melamed) Are you aware of any  
18 tables within Facebook during the entirety of the  
19 relevant time period that recorded the subject of  
20 API requests? 05:39:18

21 MR. SCHWING: Object to form.

22 Q. (By Mr. Melamed) By "subject," I mean  
23 the user -- the user's data who was the subject of  
24 the API request?

25 MR. SCHWING: Object to form. 05:39:32

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1 THE DEPONENT: The entirety of the -- the 05:39:38  
2 time period, the -- the system I'm -- I'm aware of  
3 that I -- as I understand it, logs that information  
4 is -- is the -- the -- [REDACTED] which  
5 exists today. 05:40:00

6 Again, I -- I've understood that system  
7 as best I can, and that's -- that's the best --  
8 that's my -- from talking to the people involved in  
9 it, that's my understanding of how that works to  
10 the best of my ability. 05:40:15

11 Q. (By Mr. Melamed) Prior to the  
12 implementation of the Did access system, did  
13 Facebook maintain any logs of the individuals whose  
14 data was the subject of a request?

15 A. [REDACTED] 05:40:40  
16 [REDACTED]  
17 Again, I -- I've spoken to -- to several people  
18 about this, and it's possible there are systems,  
19 again, that -- that I have been unable to ascertain  
20 their existence of that did that. But my 05:41:00  
21 understanding [REDACTED]

22 [REDACTED]  
23 [REDACTED]

24  
25 ///// 05:41:14

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1 (Exhibit 425 was marked for 05:41:14  
2 identification by the court reporter and is  
3 attached hereto.)

4 MR. MELAMED: Just introduced what's been  
5 marked as Exhibit 325 -- I'm sorry. 425. My 05:41:41  
6 mistake.

7 Q. (By Mr. Melamed) And just for the  
8 record, Exhibit 425 was provided to us, to  
9 plaintiffs, by counsel for Facebook. I don't  
10 anticipate that you've seen this before, Mr. Cross. 05:41:55  
11 It's possible you have, but I just want to ask you  
12 a couple questions about it.

13 And it's probably going to be easiest if  
14 I share my screen. It's a very large -- a very  
15 lengthy Excel spreadsheet. You can go ahead and 05:42:13  
16 look at it. I don't mean to cut you off from  
17 familiarizing yourself from it.

18 THE DEPONENT: Sorry. Where would I  
19 access this? Are you just going to share your  
20 screen or -- 05:42:33

21 MR. MELAMED: Okay. I will share my  
22 screen. But it should be in marked exhibits on --  
23 in Exhibit Share for deposition of Simon Cross,  
24 Volume 4.

25 Austin, are you able to see it? 05:42:46

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: I can. 05:42:51

2 Simon, do you have the Egnyte page up?

3 THE DEPONENT: Yes, I do. Exhibit 3 --

4 MR. SCHWING: The top -- you should see

5 things that say Simon Cross. It would be the top 05:43:02

6 one, I believe.

7 THE DEPONENT: Yeah, that's it.

8 MR. MELAMED: Yes. As I mentioned, this

9 is really, really long. I'm going to direct you

10 very specifically to a few lines. I just want to 05:43:13

11 understand if you're able to provide answers. If

12 you're not, that's fine.

13 So I'm going to scroll down to line

14 36,608.

15 (Discussion off the stenographic record.) 05:43:28

16 MR. SCHWING: Matt, if you're trying to

17 demonstrate your -- your diligence by saying you've

18 reviewed 36,000 rows of this, I am impressed.

19 MR. MELAMED: I appreciate that you think

20 that I reviewed 36,000 rows of this table that was 05:43:56

21 provided, I think, last night.

22 MS. WEAVER: I'll take credit for it.

23 SPECIAL MASTER GARRIE: Hey, Counsel.

24 Can I ask a question?

25 What are the column values for A? 05:44:23

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1 MR. MELAMED: I will tell you -- I will 05:44:31  
2 open it locally and tell you, if that's okay, and  
3 I'll state for the record once I get down.

4 Is that okay?

5 SPECIAL MASTER GARRIE: Yeah. If you 05:44:37  
6 want to get to the bottom, just hit control page  
7 down or control N.

8 MR. MELAMED: Thank you very much. That  
9 was -- and the highlight -- and then I will tell --  
10 tell you now for the record, Special Master Garrie, 05:45:01  
11 column A is table\_name. Column B is column\_name.  
12 And my understanding is that these reflect the  
13 column names for a list of Hive tables for which  
14 Facebook is proposing to search and produce data  
15 from a statistically significant sample. 05:45:34

16 I just want to --

17 Q. (By Mr. Melamed) Do you see these five  
18 columns that are highlighted on my screen,  
19 Mr. Cross?

20 A. I do. 05:45:44

21 Q. Five entries. I'm sorry.

22 And you see that the first one [REDACTED]

[REDACTED]

[REDACTED]

25 MR. MELAMED: Apologies, Rebecca. 05:46:07

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1 THE DEPONENT: I see that, yes. 05:46:10

2 Q. (By Mr. Melamed) Okay. And that that is  
3 actually each of these five cells, column A, rows  
4 36,008 through -612 reflects the same descriptor  
5 for the table name. 05:46:25

6 Do you see that?

7 A. I do see that.

8 Q. Do you know if these reflect the [REDACTED]  
[REDACTED] that you testified about before?

10 MR. SCHWING: I'm just going to state for 05:46:40  
11 the record that we didn't receive these in advance  
12 of the deposition. I understand you represented  
13 that this was provided last night, Matt, but just  
14 to be clear, the witness has not had a chance to  
15 look through this. 05:46:51

16 MR. MELAMED: Let me -- you're right,  
17 Austin. Let me correct the record. This was not  
18 received last night. It was received Thursday.  
19 That was my mistaken.

20 I am only asking about this because of 05:46:58  
21 Mr. Cross's testimony before about the [REDACTED]  
22 It's just -- you know, and I understand that  
23 Mr. Cross likely has not reviewed this, but I can  
24 confirm that.

25 So I'll ask that, but I understand -- I 05:47:12

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1 understand the point you're making, Mr. Schwing. 05:47:16

2 Q. (By Mr. Melamed) Mr. Cross, have you  
3 reviewed this table before?

4 A. I have not reviewed this table before.

5 Q. Are you -- do you know whether the rows 05:47:26  
6 36,608 through -612 are related to the [REDACTED]  
7 you described in your testimony today?

8 MR. SCHWING: It's outside the scope of  
9 the deposition. Object to form.

10 THE DEPONENT: I cannot ascertain if 05:47:48  
11 these relate to the -- the [REDACTED] I've  
12 previously talked about. I cannot ascertain that  
13 from this.

14 Q. (By Mr. Melamed) Do you know what the  
15 information in column B for these five tables 05:48:07  
16 reflects?

17 Do you have any understanding of what  
18 [REDACTED] means?

19 MR. SCHWING: Same objections.

20 THE DEPONENT: Sorry. I -- [REDACTED] [REDACTED]

[REDACTED]

[REDACTED] A [REDACTED]

[REDACTED]

24 Q. (By Mr. Schwing) And do you have any

25 understanding of what [REDACTED] means in the 05:48:35

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1 context of Hive tables? 05:48:39

2 MR. SCHWING: Same objections.

3 THE DEPONENT: [REDACTED]

4 [REDACTED] seems to be a -- my

5 understanding is something that is specific to the 05:48:54

6 table itself and therefore could mean different

7 things in different contexts.

8 Q. (By Mr. Melamed) What about [REDACTED]

9 MR. SCHWING: Same objections.

10 THE DEPONENT: Again, [REDACTED] to me is 05:49:14

11 a table-specific property, so it could mean

12 something different in different tables.

13 Q. (By Mr. Melamed) What about

14 [REDACTED]

15 MR. SCHWING: Same objections. I'll have 05:49:29

16 a same objection with respect to [REDACTED] if you get to

17 that too.

18 THE DEPONENT: Similarly, that's a

19 table-specific property. I'd be speculating what

20 it means. I'd need to review much more information 05:49:43

21 to give you an answer to that.

22 Q. (By Mr. Melamed) And what about [REDACTED]

23 A. My understanding is [REDACTED]

24 [REDACTED] so within a

25 particular time window. Again, my understanding is 05:50:02

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1 that's in favorable by table. 05:50:07

2 MR. MELAMED: Thank you. You can put  
3 that exhibit away if you have it open.

4 Q. (By Mr. Melamed) We were talking before  
5 we returned to the Did table for a minute about the 05:50:34  
6 manner by which third parties could access user  
7 data, and we talked about the rest API and the FQL  
8 API, and we've talked periodically about  
9 Open Graph, correct?

10 A. Well, we talked about the Graph API. We 05:50:49  
11 haven't talked about Open Graph.

12 Q. Thank you for the correction. We talked  
13 about the Graph API.

14 During what period of time did third  
15 parties access user data via Facebook login? 05:50:59

16 MR. SCHWING: Object to form.

17 THE DEPONENT: So Facebook login is a --  
18 is a name that refers to the dialogue by which  
19 users grant apps access to information. It renders  
20 platform permissions and emits access tokens. But 05:51:31

21 typically the apps then take the access token and  
22 make calls against the Graph API or previously the  
23 rest API in order to actually access information.

24 Q. (By Mr. Melamed) So is it right to  
25 understand Facebook login as providing third 05:51:50

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1 parties a user's access token? It is one way that 05:51:52

2 a third party can get a user's access token?

3 A. Facebook login is -- is -- is a -- is the  
4 primary way by which apps get an access token for a  
5 user. 05:52:10

6 Q. Is there a time period during which  
7 Facebook login has been the primary way that apps  
8 get access tokens for users?

9 A. The equivalent of the login dialogue has  
10 been in existence throughout platform, as I 05:52:32  
11 understand it, from 2007. It's now branded and  
12 called Facebook login in -- in -- in materials for  
13 developers, but a -- a product that does that job  
14 has been part of the Facebook open platform since  
15 the beginning. 05:52:54

16 Q. Did it go by any other names before it  
17 became branded as "Facebook login"?

18 A. The previous name for the login dialogue  
19 was -- "Facebook Connect" is commonly a term used  
20 to refer to the Facebook login dialogue, although 05:53:13  
21 Facebook Connect refers to a -- a broader program  
22 of work.

23 Q. But Facebook Connect includes Facebook  
24 login but is not limited to Facebook login?

25 A. Facebook Connect was -- was a term 05:53:38

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1 associated with allowing apps to integrate Facebook 05:53:45  
2 into third-party -- sorry -- third parties to  
3 integrate Facebook into their mobile apps and  
4 websites, and the login dialogue was the mechanism  
5 by which users granted permission for that 05:54:06  
6 information to be shared.

7 Q. And so Facebook login existed from the  
8 inception of platform through the present; is that  
9 right?

10 A. My understanding of what today is known 05:54:22  
11 as "Facebook login," an equivalent product has  
12 existed since the beginning of -- of platform in  
13 the earlier days. It was called "the login  
14 dialogue" or the -- the "authentication screen."  
15 It was known by -- by different names at different 05:54:44  
16 times. But generally an equivalent to Facebook  
17 login has existed since the beginning.

18 Q. What other ways do third parties access  
19 user tokens?

20 A. Login dialogue is by far the primary way. 05:55:06  
21 One other mechanism is something called

22 [REDACTED]  
[REDACTED]  
[REDACTED] and as a result the product

25 then [REDACTED] 05:55:33

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1 [REDACTED] 05:55:38

2 Q. And is [REDACTED] as in short for

3 [REDACTED]

4 A. [REDACTED]

5 Q. Are there particular circumstances in 05:55:49  
6 which [REDACTED] is used?

7 A. [REDACTED] was typically used in the case  
8 of devices or circumstances where a [REDACTED]

9 [REDACTED]

10 Q. Will you help me understand when a 05:56:16  
11 developer -- the circumstance where a developer

12 [REDACTED]

13 A. So an example would be where a developer  
14 is building a Facebook experience on a smart TV or  
15 set-top box that [REDACTED] [REDACTED]

16 [REDACTED] As a result, they might use [REDACTED] in  
17 order to provide people a [REDACTED]

18 [REDACTED] on that  
19 device.

20 Q. So when -- when a third party requests a 05:57:14  
21 type of user information from Facebook, can you  
22 explain the data flow. How does -- it goes from a  
23 request to Facebook into determining whether there  
24 is permission or not, et cetera, to determining  
25 whether to return data. And I'm not phrasing this 05:57:37

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1 elegantly, but I'm just trying to understand the 05:57:40  
2 process of the data flow and then whether that has  
3 changed over time.

4 If you want me to restate the question,  
5 I'm happy to do so and break it down. But I'm 05:57:49  
6 looking for that kind of information.

7 MR. SCHWING: I apologize, Matt. The  
8 question is vague. But if the witness understands  
9 the question, please go ahead and give the --

10 (Discussion off the stenographic record.) 05:58:09

11 THE DEPONENT: I -- I can give a  
12 high-level overview if that would be helpful and  
13 then maybe this -- you know, that would -- that  
14 would help.

15 So typically a -- the first thing that 05:58:26  
16 happens is an app asks the user for permission to  
17 access information, and to do that, they'll display  
18 the login dialogue.

19 At that time, the developer requests or  
20 specifies the permissions they would like the user 05:58:50  
21 to agree to, and the login dialogue -- the code  
22 behind the login dialogue will determine whether or  
23 not those permissions are, indeed, requestable from  
24 this particular user. [REDACTED]

[REDACTED] 05:59:10

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1           Then the user grants some or all of those           05:59:12  
2       permissions, and the -- they have various options  
3       there. At that point, [REDACTED]

4       [REDACTED] and if the app does  
5       not already have one, they are given [REDACTED]           05:59:36  
6       [REDACTED] of behalf of that [REDACTED]

7       [REDACTED]  
8           Then the app uses that [REDACTED] to  
9       make API requests to particular API methods. The  
10      API, the Graph API or the API they're calling, will           05:59:59  
11      then evaluate that request and determine what  
12      information, if any, can be emitted.

13           A number of things, many things, go into  
14      that termination. One of them is does the user --  
15      has the user granted the appropriate permission or           06:00:24  
16      permissions required to access this data. A number  
17      of other checks are made as well. And then  
18      Facebook's internal privacy rules are evaluated,  
19      and ultimately the API returns a request or returns  
20      a response that satisfies those requests.           06:00:49

21           That's a -- a high-level typical overview  
22      of how these systems work.

23           Q.    (By Mr. Melamed) I'd like to ask you  
24      some follow-ups. If you -- you know, to the extent  
25      you don't know, you don't know.           06:01:03

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1 But -- we talked about this before. I 06:01:06  
2 just want to make sure I understand it correctly.

3 The first step of this is the app asking  
4 for user permission, correct? Or an early step, if  
5 not the first. So the app asks the user, can I 06:01:18  
6 access this type of information, right?

7 MR. SCHWING: Objection. Vague.

8 THE DEPONENT: And I'm describing here  
9 a -- a typical way that this would work. And the  
10 first step, again, typically, is that the user 06:01:37  
11 takes an action in the app which results in the app  
12 request showing the login dialogue to the user or  
13 redirecting the user to the login dialogue.

14 But typically the first thing that  
15 happens is the user takes an action. 06:01:59

16 Q. (By Mr. Melamed) Was there any point in  
17 time going back to 2007 where the app did not have  
18 to ask users for permission for different types of  
19 information the app could request?

20 MR. SCHWING: Object to form. 06:02:18

21 THE DEPONENT: My understanding is that  
22 in certain very narrow scenarios, for example,  
23 where a third party had built a Facebook  
24 replacement or a Facebook app for their device or  
25 platform, then the user experience would be -- 06:02:46

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1 would be different. 06:02:51

2 Q. (By Mr. Melamed) So I understand that  
3 answer to say that where a third party built a  
4 Facebook app on its device, that app did not have  
5 to ask a user's permission to get the information, 06:03:06  
6 specific types of information, from Facebook?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: Yeah. I'm not sure  
9 that's -- that's quite right.

10 In the case where Facebook partnered 06:03:28  
11 with, for example, a device manufacturer to build a  
12 Facebook experience on that device, then the app  
13 wouldn't necessarily have to render the Facebook  
14 login dialogue as -- as a -- as a standard platform  
15 app would do. 06:03:50

16 However, the user experience, you know,  
17 would -- would have requested -- you know, would  
18 have explained -- would have explained to the user  
19 what was about to happen.

20 Q. (By Mr. Melamed) How would the user 06:04:07  
21 experience have explained to the user what was  
22 about to happen?

23 MR. SCHWING: Object to form. Outside  
24 the scope.

25 THE DEPONENT: So the precise way in 06:04:26

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1 which each of these Facebook device integrations 06:04:27  
2 was designed would have -- would have -- would have  
3 differed. And I -- I -- I don't have the details  
4 on all of them.

5 But the -- the goal was, as close as 06:04:42  
6 possible, that this is a Facebook app. You have a  
7 device, there's a Facebook app on it, and it should  
8 look and feel just like logging in to -- to  
9 Facebook.

10 And there's appropriate disclosures or 06:05:00  
11 appropriate disclosures around that, as I  
12 understand it, that would say that was appropriate  
13 for the use case.

14 Q. (By Mr. Melamed) Do you know how many of  
15 these devices integrations took place? 06:05:14

16 A. On the order of -- it's hard to give a --  
17 on the order of tens or less than 200, I think,  
18 broadly. This was a very, you know -- very limited  
19 program where the goal was to enable people to have  
20 access to Facebook on other platforms and devices, 06:05:50  
21 and that was the purpose of the program. The  
22 number of the devices and platforms were supposedly  
23 limited.

24 Q. Okay. Does that program still exist?

25 MR. SCHWING: Object to form. 06:06:09

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1 THE DEPONENT: That program does not 06:06:12  
2 still exist, to my knowledge.

3 Q. (By Mr. Melamed) Do you know when that  
4 program ceased to exist?

5 A. The announcement of those partnerships 06:06:23  
6 would be begun to wound down was made on April --  
7 in April 2018, and the wind-down of that program  
8 took place in -- in 2018 and early '19.

9 Q. Do you know why the decision was made to  
10 wind down that program? 06:06:46

11 MR. SCHWING: Outside the scope. Object  
12 to form.

13 THE DEPONENT: Yeah, I -- I don't have  
14 like the -- I'm not sure I can speak on behalf of  
15 the company here completely. I -- I haven't 06:07:03  
16 reviewed the full details.

17 My understanding, though, from a personal  
18 perspective is that, first of all, these  
19 integrations were not widely used anymore. They  
20 were designed and built in a time where there were 06:07:25  
21 many more devices and mobile operating systems and  
22 platforms than there are today with regards to  
23 iOS and Android.

24 And in -- in light of the Cambridge  
25 Analytica situation, it was -- it was seen that 06:07:46

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1 the -- the -- the value that these integrations 06:07:52  
2 were providing was -- was relatively limited, and  
3 the decision was taken to wind down the program.

4 Q. (By Mr. Melamed) Are you familiar with  
5 any of the individual partners with whom Facebook 06:08:04  
6 engaged in the program?

7 A. I'm familiar with -- with -- a few of  
8 them, yes.

9 Q. So the idea was that Facebook provided  
10 the user data, all of the user data, for a 06:08:25  
11 particular -- well, let me withdraw that.

12 Can you explain how -- what user  
13 information did the -- was the partner provided?

14 MR. SCHWING: Object to form.

15 THE DEPONENT: So the goal of this 06:08:49  
16 program was to allow users to have -- one of the  
17 goals of this program was -- sorry.

18 (Discussion off the stenographic record.)

19 MR. MELAMED: Lesley, you're on --

20 (Discussion off the stenographic record.) 06:09:06

21 MR. MELAMED: Lesley, Lesley, Lesley...

22 (Discussion off the stenographic record.)

23 MR. SCHWING: Why don't we go into a  
24 breakout room, because I don't want to hear...

25 SPECIAL MASTER GARRIE: Me neither. 06:09:17

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1 MR. MELAMED: Can we go off the record. 06:09:19

2 MR. SCHWING: Let's go into a breakout

3 room.

4 SPECIAL MASTER GARRIE: Off the record,

5 mute her. 06:09:20

6 MR. MELAMED: Thank you, John. Can you

7 mute -- can you mute Lesley.

8 MR. SCHWING: I'm going into the breakout

9 room.

10 MR. MELAMED: Thank you, Austin. 06:09:20

11 THE VIDEOGRAPHER: Did you want to go off

12 the record? I'm sorry.

13 THE COURT REPORTER: Yes.

14 THE VIDEOGRAPHER: Thank you.

15 Off the record. It's 6:09. 06:09:39

16 (Recess taken.)

17 THE VIDEOGRAPHER: We are back on the

18 record. It's 6:53 p.m.

19 Q. (By Mr. Melamed) Before the break, we

20 were talking about partner integrations. 06:53:04

21 Do you remember that, Mr. Cross?

22 A. I do remember that.

23 Q. And I think you had testified that

24 partner integrations were phased out, and I can't

25 recall if you gave a time period when those -- that 06:53:21

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## HIGHLY CONFIDENTIAL

1 project or that program was phased out. 06:53:24

2 Can you tell me when those were phased  
3 out?

4 A. My understanding is that partner  
5 integrations, the announcement of the wind-down of 06:53:32  
6 that program was in made in April of 2018 and then  
7 the wind-down of the program proceeded through 2018  
8 and into the early parts of 2019.

9 Q. Did Facebook track the information it  
10 made available to partners in the program as part 06:53:53  
11 of the integration process?

12 A. Can you help -- help me understand what  
13 you mean by "as part of the integration process."

14 Q. Sure. We can take that out of that. We  
15 can take that phrase out of the question. So I'll 06:54:20  
16 restate it.

17 Did Facebook track the information it  
18 made available to its partners when it pursued --  
19 you know, when it engaged -- when those partners  
20 engaged the process of creating a Facebook-like app 06:54:31  
21 for their device?

22 MR. SCHWING: Object to form.

23 THE DEPONENT: Facebook [REDACTED]  
[REDACTED]

25 Q. (By Mr. Melamed) So if you were using 06:54:56

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1 one of the devices that were part of this 06:54:57  
2 integration process, Facebook would have tracked  
3 API calls that the device you were using made to  
4 complete the integration process?

5 A. Facebook [REDACTED] [REDACTED]  
[REDACTED]

7 Q. And did it do so on an individual basis?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: Can you help me understand  
10 what you mean by "on an individual basis." 06:55:35

11 Q. (By Mr. Melamed) Sure.

12 So let's make it more concrete. Are you  
13 aware whether Huawei was one of the partners, the  
14 integration partners?

15 A. There was a number of integration 06:55:55  
16 partners. I -- I don't recall all of them in  
17 particular. That information is available in the  
18 interrogatory responses if you -- if you want to  
19 refer to those.

20 Q. Okay. So I'm going to represent to you 06:56:07  
21 that Huawei was identified as one of those  
22 partners.

23 So if you engaged with a Huawei device  
24 and said, yes, I'd like to use Facebook on this  
25 device, did Facebook track the API calls that were 06:56:25

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1 made for your information by Huawei as part of that 06:56:30  
2 integration?

3 MR. SCHWING: Object to form.

4 THE DEPONENT: Facebook [REDACTED]

5 [REDACTED] 06:56:45  
6 using your -- [REDACTED]

7 [REDACTED]

8 Q. (By Mr. Melamed) And where would that  
9 information be logged in Facebook?

10 A. My understanding is that would have been 06:57:13  
11 logged in the [REDACTED]

12 Q. That's the -- the [REDACTED] that  
13 later became split as the [REDACTED]

14 [REDACTED]

15 MR. SCHWING: Object to form. 06:57:36

16 Q. (By Mr. Melamed) All I'm trying to do is  
17 make sure I understand which table you're talking  
18 about.

19 A. My understanding is that information  
20 would have been logged in the [REDACTED] when 06:57:47

21 it was a single table, and then it would have been  
22 logged in one of the [REDACTED]

23 depending [REDACTED]

24 Q. And so the information would have been

25 [REDACTED], so using this example, [REDACTED] 06:58:06

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1 [REDACTED]; is that correct? 06:58:12

2 A. So my understanding is the way the

3 [REDACTED] to the

4 [REDACTED] the fact [REDACTED]

5 and then [REDACTED], 06:58:26

6 so there would be a -- [REDACTED] that

7 each [REDACTED]

8 Q. And do you know whether Facebook still

9 has the logs of those requests from integration

10 partners? 06:58:55

11 MR. SCHWING: It's outside the scope of

12 the deposition.

13 THE DEPONENT: [REDACTED]

14 [REDACTED] dating back

15 that far. 06:59:14

16 Q. (By Mr. Melamed) Do you know whether

17 Facebook has any logs reflecting the partner

18 integrations, the data that was requested as part

19 of the partner integrations?

20 MR. SCHWING: Object to the form. 06:59:31

21 THE DEPONENT: My understanding is that

22 the [REDACTED] as we've previously referred to

23 it, would [REDACTED]

24 [REDACTED]

25 Q. (By Mr. Melamed) Did Facebook ever 06:59:59

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## HIGHLY CONFIDENTIAL

1 receive information about users from third parties? 07:00:00

2 MR. SCHWING: Objection to form.

3 THE DEPONENT: Can you break the question

4 down -- down for me a little. Did Facebook -- can

5 you ask the question again? 07:00:16

6 Q. (By Mr. Melamed) Sure.

7 So I'm moving on to topic 8, and the

8 first subtopic in topic 8 is the type -- is whether

9 and how Facebook tracked the type and purpose of

10 data and information Facebook received from third 07:00:28

11 parties. So I'm just starting with a predicate

12 question.

13 Did Facebook receive information from

14 third parties about users?

15 MR. SCHWING: Objection. Vague. 07:00:43

16 THE DEPONENT: Can you help me understand

17 what you mean by "about users."

18 Q. (By Mr. Melamed) Did Facebook receive

19 information about any of its users from a third

20 party and not directly from the user or the user's 07:01:00

21 friends or anybody else -- sorry. So I'll stop

22 there. User or user friends?

23 MR. SCHWING: Same objection.

24 THE DEPONENT: Again, I'm finding it hard

25 to give an answer to the question in the way 07:01:22

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1       it's -- in the way it's phrased. There's a number       07:01:24  
2       of potential different interpretations which I --  
3       which I'd like to try and understand before I give  
4       an accurate answer.

5           Q.     (By Mr. Melamed) What are the potential       07:01:36  
6       interpretations that are making my question  
7       unclear?

8           MR. SCHWING: Object to form.

9           THE DEPONENT: So an example that I'd  
10       like to understand if you mean to include is where       07:01:49  
11       a user uses a third-party app to post stories and  
12       content back to Facebook.

13          Q.     (By Mr. Melamed) Is that one way that  
14       Facebook received information about users from  
15       third parties?       07:02:11

16          A.     It depends on your interpretation of  
17       whether it comes from a third party. So that's --  
18       that's the thing I'm having -- just I want to get  
19       clarity on to make sure I'm going to give you an  
20       accurate answer.       07:02:31

21          Q.     Do you interpret that as coming from a  
22       third party?

23          MR. SCHWING: Object to form.

24          THE DEPONENT: The API request is being  
25       made by -- typically made by code written by a       07:02:46

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1 third party, but it's in response generally to a 07:02:50  
2 user's activity in that app.

3 Q. (By Mr. Melamed) Did Facebook ever  
4 receive data about individual users through the use  
5 of the Facebook Pixel? 07:03:06

6 MR. SCHWING: Outside of the scope of the  
7 deposition to the extent of at least advertising.

8 You can go ahead and answer if you know,  
9 sir.

10 THE DEPONENT: Yeah. So the Facebook 07:03:19  
11 Pixel is a -- an advertising -- advertising  
12 product. My understanding is that a user was using  
13 an app or website integrated with the Facebook  
14 Pixel, then some information about activities in  
15 that API or website would be shared back with 07:03:39  
16 Facebook. But -- the specifics of how the Facebook  
17 Pixel works is not -- is not something I'm  
18 particularly well qualified to -- to speak to.

19 Q. (By Mr. Melamed) Did Facebook use its  
20 Pixel product for anything other than 07:03:55  
21 advertising-related purposes?

22 A. The Facebook Pixel is an -- is an  
23 advertising product, and my understanding is its  
24 purpose is to do with -- with advertising.

25 Q. What about the Facebook Like button? Did 07:04:23

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## HIGHLY CONFIDENTIAL

1 Facebook ever receive information from the use of 07:04:27  
2 the Facebook Like button on third-party websites?

3 A. So in order to -- to render a Like  
4 button, if a user visits a Web page that has the  
5 Like button embedded, then the Like button would 07:04:46  
6 get -- a call would be made to Facebook servers  
7 to -- to render the Like button, and in the act of  
8 doing that, Facebook would know that a Like button  
9 had been rendered on a particular page. If the  
10 user who had logged in -- sorry. 07:05:04

11 If the user was logged in to Facebook at  
12 the time that they noted the Web page with the Like  
13 button in it, Facebook would know that that Like  
14 button had been rendered on behalf of the user.

15 Q. Did -- was it required -- well, let me 07:05:27  
16 step back and ask a different question.

17 You said that if the user was logged in  
18 to Facebook at the time they clicked the Like  
19 button on another site, then the information would  
20 be rendered back to Facebook that that individual 07:05:44  
21 had clicked it; is that correct?

22 A. Sorry. No. I want to clarify.

23 What I mean is if a user visits a website  
24 that has embedded the Like button on it, then a  
25 call will be made to Facebook servers to render the 07:06:03

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1 Like button. 07:06:06

2 If the user who visited that Web page was  
3 logged in to Facebook, then Facebook would know  
4 that the user was logged in, and that was  
5 information used to make the Like button function. 07:06:26

6 Q. Would the Like button -- let me withdraw  
7 that.

8 Was it a prerequisite for the Like button  
9 appearing on a -- on a third party's website that  
10 the user be logged in to Facebook before visiting 07:06:46  
11 that website?

12 A. Sorry. I'm not sure I understand the --  
13 the question. Can you ask -- can you ask it again.

14 Q. Sure.

15 So let's say you go to a website and you 07:06:59  
16 see a Like button. Does -- does that indicate to  
17 Facebook -- let me withdraw that.

18 Does that mean that you have -- you are  
19 logged in to Facebook in order to see that Like  
20 button? 07:07:15

21 A. No. The Like button would be rendered --  
22 the people -- if -- if they were logged in to  
23 Facebook or if they were not logged in to Facebook.

24 Q. And now let's say you are on the website  
25 with the Like button and you click -- you select 07:07:32

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1 the Like button. You click it. 07:07:34

2 In what circumstances would that  
3 information be communicated -- that you had clicked  
4 the Like button be communicated back to Facebook?

5 MR. SCHWING: Object to form. 07:07:48

6 THE DEPONENT: Typically the purpose of  
7 the Like button is that when you click it, you're  
8 telling Facebook that you like the page on which  
9 it's embedded or the entity for which it is set up.  
10 So the act of clicking on the Like button would 07:08:05  
11 tell Facebook that you had liked it.

12 Q. (By Mr. Melamed) Would you need to have  
13 first opened a browser page or the Facebook app and  
14 logged in before Facebook could track that you had  
15 clicked the Like button? 07:08:26

16 A. Yes. For Facebook to register a Like, it  
17 needs to be associated with your Facebook user  
18 account, and so if you clicked the Like button, the  
19 Like would not be registered unless you were logged  
20 in to Facebook. 07:08:47

21 Q. Is it -- is it necessary that you have  
22 logged in to Facebook during that browsing session  
23 in order for the Like button to -- communication  
24 about your clicking the Like button to be  
25 communicated back to Facebook? 07:09:08

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```
1      A.    The Like button is or was -- is rendered          07:09:14
2      through your Facebook session.  So if you're logged
3      in to Facebook in your browser, then the Like
4      button will render as if you're logged in.
```

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1 settings as well, for example. But typically, the 07:10:57

2

3

4

5 occurred. 07:11:16

6

Q. What other types of

7

8

A. So, for example, if you

9

if you -- if you have

10

on your phone, for example, then Facebook

07:11:31

11

in order to protect

12

your security. That's one example of when a

13

14

Q. When that -- when you have selected that

15

Like button, does Facebook track the information

07:11:53

16

internally that you have selected a Like button on

17

the site you were visiting?

18

MR. SCHWING: Object to form.

19

THE DEPONENT: Can you just be clear

20

about what mean we by "select." Earlier you talked

07:12:06

21

about "click on the Like button." Is -- is that

22

what you mean?

23

Q. (By Mr. Melamed) I'm sorry. I don't

24

mean to be -- I'm not meaning to be overly

25

technical or trick you.

07:12:17

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1 Let's say you click -- you go to visit a 07:12:18  
2 website. You click on a Like button. That  
3 information, we've established, if you have an open  
4 session, is communicated back to Facebook, correct?

5 A. Correct. If you click on a Like button 07:12:28  
6 and you're logged in to Facebook, then Facebook  
7 will register the fact that you've liked the URL  
8 entity for which the Like button has been set up.

9 Q. Where does Facebook register that  
10 information in its internal systems? 07:12:44

11 A. So clicking on the Like button --  
12 sorry -- sorry.

13 MR. SCHWING: It's okay.

14 THE DEPONENT: When you like something  
15 using the Like button, that is considered a part of 07:13:01  
16 your Facebook profile, and it [REDACTED] in  
17 general, what we call [REDACTED] so the --  
18 the [REDACTED] and --  
19 and [REDACTED]

20 Q. (By Mr. Melamed) And that is in TAO; is 07:13:23  
21 that correct?

22 A. TAO is a -- [REDACTED]  
[REDACTED] [REDACTED]  
24 when you perform a user action like that, [REDACTED]  
[REDACTED] 07:13:43

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1 Q. And then it would also be stored in Hive; 07:13:46  
2 is that right?

3 MR. SCHWING: Object to form.

4 THE DEPONENT: So generally, [REDACTED]

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 Q. (By Mr. Melamed) Did Facebook ever  
8 collect information about a user when the user  
9 logged in to Facebook from a mobile device?

10 Sorry. Let me restate that. 07:14:23

11 Did Facebook collect user's -- ever  
12 collect a user's phone number when the user logged  
13 in from a mobile device?

14 A. Sorry. Let's -- I'm not sure I  
15 understand -- again, understand the question. 07:14:44

16 If a user logged in to -- to -- to what?

17 Q. To Facebook. If a user logged in to  
18 Facebook from their mobile device, did Facebook  
19 ever collect that user's phone number via that  
20 interaction without -- without explicitly asking 07:15:02  
21 the user to collect that information?

22 A. So, again, are you talking about where a  
23 user logs in to Facebook using a phone number?

24 Q. No. Just logs in without using a phone  
25 number, using the user name and password that's not 07:15:22

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1 a phone number, from a mobile device. Did Facebook 07:15:26  
2 ever collect, as part of that, the phone number  
3 that the user had logged in -- the phone number of  
4 the device that the user had logged in?

5 MR. SCHWING: Object to form. 07:15:40

6 THE DEPONENT: Yeah, I'm -- I'm not  
7 certain that -- that -- I don't know if that's  
8 happened or not. [REDACTED] -- the

9 [REDACTED]  
10 [REDACTED] I'm -- I'm not an expert 07:16:02

11 in -- in how Facebook's login processes work and  
12 what -- what information is exchanged with Facebook  
13 from the device or the carrier that they're logging  
14 in on.

15 Q. (By Mr. Melamed) I'm asking because I'm 07:16:16  
16 trying to establish whether Facebook collected  
17 these things and then, if so, where they tracked  
18 them. And that's the connection to the topic, just  
19 to be clear.

20 Did Facebook collect users' mobile device 07:16:30  
21 IDs?

22 A. Can you be more specific, "mobile device  
23 IDs."

24 What do you mean by that? Sorry.

25 Q. Did Facebook ever collect a user's IDFA 07:16:59

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1 when the user logged in to Facebook using their 07:17:08  
2 mobile device?

3 A. By "IDFA," you're referring -- what are  
4 you referring to with "IDFA"? You're referring to  
5 Apple's -- Apple's identifier, which is specific to 07:17:25  
6 iOS?

7 Q. Let's -- let's start there. Did Facebook  
8 ever collect a user's Apple identifier that was  
9 specific to iOS when the user logged in to  
10 Facebook? 07:17:38

11 A. Logged in to Facebook when? On a mobile  
12 or on -- again, I -- again, I'm not trying to be  
13 difficult here. I want to make sure I'm giving you  
14 the best possible answers I can.

15 These -- these terms and topics are very 07:17:54  
16 complicated, and I want to make sure I'm giving you  
17 the right answer.

18 Q. If a user logged in to Facebook using an  
19 Apple mobile device, did Facebook -- at any point  
20 in Facebook's history relevant to this case, 2007 07:18:05  
21 to present, did Facebook collect a device  
22 identifier?

23 A. Again, maybe I'm back to -- we got to --  
24 a specific type of device identifier there, but  
25 we're going back to general device identifiers, 07:18:27

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1 which is a term I'm not sure I fully understand. 07:18:31

2 I see Special Master Garrie --

3 Q. Are you --

4 A. -- is on the -- on the call.

5 THE DEPONENT: Is there guidance you'd 07:18:37

6 like to give, Mr. Garrie?

7 SPECIAL MASTER GARRIE: Not yet.

8 Q. (By Mr. Melamed) Did -- when Facebook --

9 when a user logged in to Facebook using an Apple

10 mobile device, did Facebook ever collect the IDFA, 07:18:48

11 which is the Apple device identifier?

12 A. My understanding is that while I'm not an

13 expert, again, at Facebook's login systems and how

14 that works, [REDACTED] if you

15 [REDACTED] 07:19:11

16 then the Facebook app -- [REDACTED]

17 [REDACTED].

18 Q. And if the user logged in to the Facebook

19 via Android, would Facebook collect the user's GA

20 ID? 07:19:37

21 A. I'm less familiar with -- with -- with

22 how Android works. Assuming they're relatively

23 similar, [REDACTED]

[REDACTED]

25 Q. How -- how did Facebook associate those 07:19:59

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1 IDs with users in their -- in Facebook's internal 07:20:05  
2 systems?

3 MR. SCHWING: Outside of the topic, the  
4 scope of the deposition. It's vague.

5 THE DEPONENT: Yeah, I -- I'm not an 07:20:23  
6 expert in -- in how these -- how these systems  
7 work. From -- from my experience, though, what I  
8 do know is that if you are [REDACTED] on  
9 [REDACTED] and that [REDACTED] with  
10 such [REDACTED] then that connection 07:20:44

11 [REDACTED]  
12 [REDACTED], although the precise nature and how that  
13 was stored is not something I'm -- I'm an expert  
14 on. I cannot give canonical testimony on.

15 Q. (By Mr. Melamed) And so your -- you do 07:21:05  
16 not want to provide testimony on -- well, let me  
17 state this in a positive way.

18 Can you identify how Facebook tracked  
19 mobile device IDs that were associated with users?

20 MR. SCHWING: Outside the scope of the 07:21:28  
21 deposition.

22 You can answer, if you can answer.

23 THE DEPONENT: My understanding is that  
24 when a [REDACTED] and that  
25 [REDACTED] on that 07:21:41

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1 [REDACTED], then that [REDACTED] 07:21:44

2 [REDACTED] as being

3 [REDACTED] on that

4 [REDACTED]

5 Q. (By Mr. Melamed) Do you know where that 07:22:02

6 information would be tracked? Is there a name of a

7 document or a data system that tracks that

8 association?

9 MR. SCHWING: Same objections.

10 THE DEPONENT: Again, precisely the 07:22:13

11 systems that -- that are used to -- to store that

12 information. [REDACTED]

13 be -- would have been and would [REDACTED]

14 It would likely also have been [REDACTED] and

15 the Facebook -- you know, [REDACTED] 07:22:38

16 [REDACTED]

17 Q. (By Mr. Melamed) Are you familiar with

18 the term "reciprocity" as it relates to the

19 relationship between Facebook and developers -- let

20 me break this down. 07:23:02

21 Are you familiar with the term

22 "reciprocity" as it is used inside Facebook?

23 MR. SCHWING: Objection as vague.

24 THE DEPONENT: I -- I've heard the term

25 used inside Facebook and seen it used in -- in some 07:23:14

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## HIGHLY CONFIDENTIAL

1 documents. 07:23:18

2 Q. (By Mr. Melamed) What is your  
3 understanding of what the term means?

4 MR. SCHWING: Objection.

5 Q. (By Mr. Melamed) Inside Facebook? 07:23:23

6 MR. SCHWING: Objection. Vague. Outside  
7 the scope.

8 Go ahead.

9 THE DEPONENT: Yeah, I can't speak to how  
10 that term is used inside Facebook in its entirety. 07:23:35

11 There's likely a number of ways in which that term  
12 has or has not been used by different teams at  
13 different times. The thing I -- the context I'm  
14 aware of it being used in is -- to do with the  
15 Facebook developer platform. 07:23:56

16 Q. (By Mr. Melamed) And can you explain the  
17 context -- the definition of that term and the  
18 context in which you are familiar with it being  
19 used?

20 MR. SCHWING: Object to form. 07:24:09

21 THE DEPONENT: I'm aware of the term  
22 being used to refer to information being made  
23 available to developers and users having the option  
24 to share similar data back to Facebook as part of a  
25 Facebook integration. 07:24:40

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) How do use users share 07:24:46  
2 information back to Facebook through third-party  
3 developers?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: Users using Facebook 07:24:59  
6 platform apps have -- used to have the ability to  
7 share stories from the app base back to Facebook  
8 that would appear on their Facebook timeline and  
9 friends' newsfeeds.

10 Q. (By Mr. Melamed) Is there any other 07:25:18  
11 information that third-party apps provided to  
12 Facebook about individual users?

13 MR. SCHWING: Object to form.

14 THE DEPONENT: Again, can you be specific  
15 about the -- about the time period. Is that the 07:25:45  
16 entire thing?

17 Q. (By Mr. Melamed) Let's start in 2007.  
18 What kind of information could -- could apps share  
19 back to Facebook about individual users?

20 MR. SCHWING: Object to form. 07:26:01

21 THE DEPONENT: So when an app is making  
22 API calls using a user's access token, the nature  
23 of making the API call is potentially indicative of  
24 a user's activity in that app, although it isn't  
25 necessarily. 07:26:24

## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) What about information 07:26:39  
2 that users provided a third-party app directly?  
3 Did third-party apps ever provide that information  
4 back to Facebook?

5 MR. SCHWING: Objection. Vague. 07:26:54

6 THE DEPONENT: Sorry. Can you ask the  
7 question again.

8 Q. (By Mr. Melamed) I'm not trying to be  
9 difficult here. I'm trying to establish  
10 foundationally whether Facebook was receiving 07:27:22  
11 information -- so Facebook provided information to  
12 app users through Facebook could provide  
13 information to apps, correct?

14 A. Through the Facebook platform, users  
15 could provide information to apps, yes. 07:27:37

16 Q. And as -- within the definition of  
17 "reciprocity," as you explained it, there was this  
18 idea that there could be an exchange, which meant  
19 that users should also be able to enable apps to  
20 provide information back to Facebook, their 07:27:52  
21 information back to Facebook, correct?

22 MR. SCHWING: Misstates testimony.  
23 Object to form.

24 THE DEPONENT: So going back to that  
25 definition of "reciprocity" as -- as I understand 07:28:05

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## HIGHLY CONFIDENTIAL

1 it, it's a very-high level idea that if an app is 07:28:08  
2 accessing information on behalf of a user, that  
3 that app would also offer the user the opportunity  
4 to share similar information back to Facebook.

5 Q. (By Mr. Melamed) Did that process ever 07:28:33  
6 occur? Did apps ever provide -- did users --  
7 did -- were users ever able to enable an app to  
8 provide information back to Facebook?

9 A. Yes. One of the common features of the  
10 Facebook platform was that it allowed users to 07:28:55  
11 choose to share activity in the app back to  
12 Facebook.

13 Q. How did Facebook track the information  
14 that it received from users through third-party  
15 apps? 07:29:14

16 A. If the user chose to share their activity  
17 in an app back to Facebook, then, for example, to  
18 post a story or to share a story with their  
19 friends, then -- then yes, that -- that information

20 [REDACTED] 07:29:36  
21 and made available [REDACTED]

22 [REDACTED]

23 Q. Where would that -- in which internal  
24 Facebook systems would that information be stored?

25 A. If the user chose to share a story back 07:29:56

HIGHLY CONFIDENTIAL

1 to Facebook from a third-party app, then that would 07:29:58  
2 be [REDACTED] and made available on the [REDACTED]  
3 [REDACTED] and then potentially rendered in their  
4 [REDACTED]

5 Q. The information that users could share to 07:30:18  
6 Facebook through third-party apps was not limited  
7 to stories, correct?

8 A. The -- the information that users could  
9 share or choose to share back to Facebook included  
10 stories, posts for their timeline, and also at a 07:30:38  
11 time included what was known as Open Graph actions.

12 Q. Can you provide a description of what  
13 Open Graph actions are?

14 A. Open Graph refers to a -- a -- a product  
15 that Facebook had between 2011 and sometime later 07:31:02  
16 where developers could share structured activity  
17 about a user's activity in their app back to  
18 Facebook so it could be shared with their -- their  
19 friend -- shared with their friends on their  
20 Facebook timeline. 07:31:30

21 Q. Was all of the information that was  
22 shared back to Facebook through Open Graph actions  
23 shared with the user's friends via the user's  
24 timeline?

25 MR. SCHWING: Object to form. 07:31:45

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## HIGHLY CONFIDENTIAL

1 THE DEPONENT: The information shared 07:31:51  
2 back to Facebook, the user could choose who had --  
3 which of their friends had the permissions to -- to  
4 see that information.

5 Q. (By Mr. Melamed) Was there any 07:32:20  
6 information from a third-party app shared back to  
7 Facebook that was associated with the user that  
8 Facebook did not make available to share via the  
9 user's timeline?

10 MR. SCHWING: Object to form. 07:32:42

11 THE DEPONENT: Sorry. Can -- can you ask  
12 that again.

13 Q. (By Mr. Melamed) Was there any  
14 information from a third-party app that was shared  
15 back to Facebook associated with an individual user 07:32:53  
16 that Facebook did not make available via the user's  
17 timeline -- did not make available to be shared via  
18 the user's timeline?

19 MR. SCHWING: Same objections.

20 THE DEPONENT: So referring back to my -- 07:33:16  
21 my previous testimony about when an app makes an  
22 API call using an access token of a user, that is  
23 potentially indicative of the user's activity in an  
24 app, and that wouldn't necessarily be shared on a  
25 user's timeline. 07:33:39

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) Was there any other 07:33:42  
2 type of information other than the fact of an API  
3 call being potentially indicative of the user's  
4 activity that would be shared back to Facebook but  
5 not be made available for the user to share via 07:33:56  
6 their timeline?

7 A. So there was -- a product called App  
8 Events at a time which allowed developers to share  
9 activity in their application back to Facebook for  
10 the purposes of app analytics. 07:34:26

11 Q. What time period did App Events exist?

12 A. My understanding is App Events were built  
13 or made available around 2013 to 2014, and I think  
14 that product was deprecated around 2017, 2018,  
15 although I'm not sure on the specific dates. 07:35:01

16 Q. Who would you ask if you wanted to know  
17 the specific dates during which App Events was  
18 available to be used by third parties?

19 A. The first thing I'd do is look -- look on  
20 the Facebook developer website and see if I could 07:35:18  
21 ascertain that information myself.

22 Q. Okay. When Facebook received information  
23 about App Events in this context, how did it  
24 associate that information in its internal systems  
25 with individual users? And I'm not asking for 07:35:40

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## HIGHLY CONFIDENTIAL

1 technical explanation; I'm asking for how -- 07:35:42

2 Let me restate it to make it more  
3 general.

4 How did Facebook track the information  
5 that it received from App Events about an 07:35:50  
6 individual user?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: So Facebook would have  
9 tracked App Events in its various databases,  
10 including Hive. 07:36:10

11 Q. (By Mr. Melamed) Do you know in which  
12 tables it could track App Events?

13 A. My understanding is that the API Hits  
14 table would include App Events where the -- where  
15 there was a logged-in user. 07:36:35

16 Q. Again, I don't mean to make you repeat  
17 this testimony. I really just do want to make sure  
18 I'm understanding it.

19 The API Hits table you're describing, is  
20 that the -- what subsequently became the API -- the 07:36:48  
21 API\_hits\_mobile and API\_hits\_www tables?

22 A. That's my understanding. These -- these  
23 App Events were implemented as Graph API calls, and  
24 as such, the information would be tracked in -- in  
25 those tables. 07:37:17

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## HIGHLY CONFIDENTIAL

1 Q. Other than from advertisers and data 07:37:26  
2 brokers, did Facebook ever receive payment from any  
3 third party for user information?

4 A. No. Facebook does not sell user data.

5 Q. Let me -- let me just make sure I 07:37:43  
6 understand your answer. I just asked whether it  
7 received payment. So is the answer the same?

8 A. Facebook does not sell user data, and  
9 therefore I'm not aware of a time Facebook has  
10 received payment for user data. 07:38:05

11 Q. Has Facebook ever received any payment  
12 for aggregated user data other than the context  
13 that you're now testifying today as the targeted  
14 advertising and data brokers?

15 A. I'm -- I'm not aware of any time Facebook 07:38:35  
16 has received payment for aggregated user data.

17 Q. Did Facebook ever evaluate the value to  
18 Facebook of aggregated user data?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: Sorry. The value to 07:39:08  
21 Facebook of aggregated user data? I'm sorry. I'm  
22 not sure I understand the question.

23 Q. (By Mr. Melamed) Let me restate it more  
24 simply.

25 Did Facebook ever evaluate the value to 07:39:16

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## HIGHLY CONFIDENTIAL

1 Facebook of user data? 07:39:19

2 MR. SCHWING: Object to form. Outside  
3 the scope of the deposition.

4 THE DEPONENT: I'm not sure how to answer  
5 that. I'm just sure not how to answer that 07:39:39  
6 question.

7 Like -- yeah. It's a -- it's a very --  
8 I'm not sure how to answer that question.

9 Q. (By Mr. Melamed) Did Facebook ever  
10 attempt to evaluate the value to Facebook of any 07:40:00  
11 particular type of user data?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: Again, could you give me  
14 an example of what you mean by "type of user data"?

15 Q. (By Mr. Melamed) Did Facebook ever 07:40:21  
16 attempt to evaluate the value to Facebook of data  
17 about where a user was educated, the user,  
18 you know -- an individual data point, an individual  
19 piece of information?

20 MR. SCHWING: Object to form. 07:40:50

21 THE DEPONENT: Again, I'm not sure how to  
22 answer that -- that question. It's -- it's  
23 possible that an analysis was done across the  
24 15-year time period. I -- like -- it's hard to --  
25 hard to -- hard to understand what's meant by -- by 07:41:12

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1 "value" in this context or even evaluate. 07:41:16

2 So I'm just not sure I can answer that  
3 question.

4 Q. (By Mr. Melamed) When Facebook engaged  
5 in the process of determining whether to deprecate 07:41:29  
6 certain types of API calls, did it conduct any  
7 evaluation of the potential financial impact to  
8 Facebook of deprecating those calls?

9 MR. SCHWING: The question is vague.

10 THE DEPONENT: [REDACTED] that 07:41:50

11 was [REDACTED]  
12 of -- of -- of a [REDACTED] that -- that  
13 were made in 2014, [REDACTED], as I  
14 understand it, [REDACTED]

15 [REDACTED] 07:42:15

16 Q. (By Mr. Melamed) Is that a specific  
17 document you're referencing?

18 A. I'm thinking back to a document that was  
19 prepared to try to understand the impact of the  
20 changes in 2014 on the games ecosystem. 07:42:36

21 Q. As a matter of course, did F [REDACTED] track  
22 the valuation of -- its valuation of different  
23 types of user data over time?

24 MR. SCHWING: Object to form.

25 THE DEPONENT: Again, hard -- hard to 07:43:00

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## HIGHLY CONFIDENTIAL

1 answer that question by -- do you mean -- yeah. 07:43:01

2 It's like very -- very broad question. Hard to  
3 give a specific answer.

4 Could you -- could you be more specific  
5 about a context, and maybe that would help give an 07:43:12  
6 accurate answer.

7 Q. (By Mr. Melamed) Did Facebook ever look  
8 at the value of the information it was receiving  
9 about its users and evaluate what that value was  
10 over time? Did it track how much different user 07:43:27  
11 information was worth over time?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: So I can give some  
14 examples that might -- might help here. For  
15 example, if an app -- if a user is using an 07:43:48  
16 application and is sharing stories from the  
17 application back to Facebook, then it was using  
18 that, then Facebook would track the monthly active  
19 users involved in -- in using the application and  
20 would -- would track the -- the stories shared from 07:44:09  
21 that application and would -- likely also track  
22 clicks from Facebook back to that application that  
23 the user or a user's friends had -- had taken from  
24 Facebook.

25 So there's -- there's are three types of 07:44:32

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1 things that I'm aware of that were tracked in 07:44:34  
2 relation to the Facebook developer platform in  
3 third-party developers, which is what I believe  
4 that this case is broadly about.

5 Q. (By Mr. Melamed) What -- let me withdraw 07:44:50  
6 that.

7 For those examples, were there particular  
8 document types that provided this tracking  
9 information, names of reports, internal systems,  
10 et cetera? 07:45:05

11 MR. SCHWING: The question is vague.

12 THE DEPONENT: Again -- typically --

13 typically, this kind of -- [REDACTED]

14 [REDACTED]

15 [REDACTED], and may have been [REDACTED] 07:45:19

16 [REDACTED] as well. But typically, if I wanted -- if

17 somebody wanted to understand how many users [REDACTED] were

18 using an application or the stories being shared

19 from it, typically you would -- [REDACTED]

20 [REDACTED] 07:45:36

21 Q. (By Mr. Melamed) We've talked about the

22 [REDACTED] -- correct? -- during -- during your

23 testimony today?

24 A. Yes, we've talked about the [REDACTED]

25 Q. Can you tell me what types of information 07:46:11

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1 are reflected in the [REDACTED] 07:46:14

2 A. So going -- going from memory here.

3 These are some of the things I recall in that

4 [REDACTED]

5 The first is the [REDACTED] which refers to 07:46:30

6 the [REDACTED] that would have

7 [REDACTED]

8 Another thing that was tracked was the

9 [REDACTED] is

10 [REDACTED] that maps to -- to a 07:46:52

11 [REDACTED] which is the atomic unit of -- of [REDACTED]

12 [REDACTED]

13 The next thing that were tracked is the

14 [REDACTED] whose [REDACTED] was being

15 used to [REDACTED] on that given day 07:47:15

16 and then a [REDACTED] that the

17 [REDACTED] to the [REDACTED] on the given

18 day.

19 And then my understanding is that another

20 [REDACTED], which will be 07:47:38

21 [REDACTED] that were made.

22 So from my understanding, that's --

23 that's some of the information at least tracked in

24 that table.

25 Q. You just -- you just described the [REDACTED] 07:47:53

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1 as "the atomic unit" of an [REDACTED] on the 07:47:55

2 [REDACTED] Can you elaborate on the  
3 relationship between an API call and a method?

4 A. A method is -- [REDACTED] -- a

5 [REDACTED] on -- in [REDACTED] 07:48:17

6 [REDACTED] that is [REDACTED] to a

7 [REDACTED].

8 When an app makes a call to the API,

9 it -- [REDACTED] in that

10 [REDACTED] 07:48:45

11 Q. Is there a one-to-one mapping between the  
12 API and the method that is used to call the  
13 information requested by that API?

14 A. So that -- that depends on your -- on the  
15 specific definition of API which is being used 07:49:09  
16 in -- in context.

17 So I wouldn't say it's a necessarily a  
18 one-to-one mapping, so -- yeah, I wouldn't say it's  
19 necessarily a one-to-one mapping.

20 Q. Can you explain why there isn't 07:49:23  
21 necessarily a one-to-one mapping?

22 A. So, for example, we talk about the Graph  
23 API as a -- as a -- as a thing. But the Graph API  
24 is a -- is a collection of methods, and so  
25 sometimes people are referring to it an API and 07:49:41

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1 they mean the Graph API or another company's API 07:49:44  
2 or -- or, you know, something like that, or they  
3 may be referring to an endpoint -- an API endpoint,  
4 or they may be referring to an API synonymous with  
5 a method. 07:50:02

6 So the terminology used there is -- is  
7 ambiguous, and the -- changes depending on the  
8 context.

9 Q. I'm sorry.

10 Does Facebook maintain an index that maps 07:50:11  
11 methods to specific API requests?

12 A. [REDACTED]  
13 [REDACTED] which exists  
14 to [REDACTED]

15 Q. Is that information publicly available? 07:50:35

16 A. That's -- that refers to [REDACTED]  
17 [REDACTED] is  
18 documented publicly and then how [REDACTED]

19 [REDACTED]

20 [REDACTED] which is a [REDACTED] [REDACTED]  
21 [REDACTED]

22 Q. I'm asking because if the [REDACTED]  
23 provides the method, I'm curious how we can use  
24 that method that's identified to map to an  
25 individual API request. 07:51:23

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1 Does that make -- does my -- so I'm 07:51:26  
2 asking whether Facebook maintains something that  
3 would enable us to do that.

4 A. Facebook maintains ways [REDACTED]  
5 [REDACTED] I'm not aware of 07:51:40  
6 a [REDACTED] to,  
7 say, part of the Facebook developer documentation,  
8 although those mappings can be -- [REDACTED]  
9 [REDACTED]

10 (Exhibit 426 was marked for 07:51:59  
11 identification by the court reporter and is  
12 attached hereto.)

13 MR. MELAMED: I've introduced what's been  
14 marked as Exhibit 426. Exhibit 426 is an excerpt  
15 from a CSV file produced in this case, Bates number 07:52:26  
16 FB-MDL-MTHD-00080.csv.

17 Mr. Cross and Counsel, for the record,  
18 these files are each individually so large that we  
19 could not share them, so this is an excerpt of ten  
20 rows of one of the -- what have been identified by 07:52:52  
21 counsel as the method table files. I just want to  
22 use this as an example to talk through. I'm not  
23 asking questions about these individual entries  
24 other than to understand what they -- the  
25 information that they represent. 07:53:08

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) Mr. Cross, are you 07:53:08  
2 familiar with the type of information that's  
3 reflected in this document, Exhibit 426?

4 A. Yes, I am.

5 Q. And you reviewed it in preparation for 07:53:24  
6 today?

7 A. I -- I -- I think I reviewed this sample  
8 in preparation for today, and I -- I've worked with  
9 API methods previously.

10 Q. And so can you see my screen, that I'm 07:53:36  
11 sharing Exhibit 426?

12 A. I can, but I also have the information  
13 available, so I don't think you need to, unless  
14 it's useful for you, Mr. Melamed.

15 MR. MELAMED: Thank you. I'll share for 07:53:50  
16 now. I've enlarged -- the only change I've made to  
17 what I think you downloaded and is enlarged in  
18 column size just so we can see a little bit more of  
19 what's in the column.

20 Q. (By Mr. Melamed) When you used the 07:53:59  
21 [REDACTED] internally, is this the format that is  
22 returned to you?

23 A. Yes, this matches how information is  
24 represented in the [REDACTED]

25 Q. So if you look at column A in that, the 07:54:19

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1 header of column D is DS. 07:54:22

2 Do you see that?

3 A. I do.

4 Q. And what does [REDACTED] stand for in this

5 context? 07:54:28

6 A. [REDACTED] in which [REDACTED]

7 [REDACTED]. It would refer to a

8 [REDACTED]

9 Q. So all of the entries on this excerpt  
10 reflect entries from December 19th, 2019; is that 07:54:46  
11 accurate?

12 A. My understanding is that these were --

13 [REDACTED] made by a [REDACTED]

14 in a [REDACTED] indicated by the

15 date, yes. 07:55:04

16 Q. And column B is [REDACTED]

17 Do you see that?

18 A. I do.

19 Q. And that is a -- is the [REDACTED] wholly

20 numeric identifier? 07:55:17

21 A. Yes. [REDACTED]

22 [REDACTED]

23 Q. And what is [REDACTED]

24 [REDACTED]

25 A. So what I mean by that is when an object 07:55:43

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1 is created in [REDACTED] 07:55:46

2 [REDACTED] that entity [REDACTED], and

3 [REDACTED] are used for -- today are used for any

4 [REDACTED]

5 Q. Is there -- 07:56:13

6 A. Let -- let me back up. I want to make  
7 sure the record is clear on this.

8 There are -- today, if an entry is

9 [REDACTED], it will be

10 [REDACTED] but there are [REDACTED] 07:56:27

11 [REDACTED] which were [REDACTED]

12 was -- [REDACTED], and in those cases, those

13 [REDACTED]

14 Q. When was this [REDACTED] created?

15 A. I don't -- I'm not sure on the precise 07:56:48

16 date. This is a question about Facebook's general  
17 data infrastructure, but my understanding is it's  
18 worked this way or a variant of this way during  
19 my -- my entire tenure at Facebook.

20 Q. And are you familiar with what the 07:57:06

21 structure of an API ID was before the time period  
22 when the --

23 This is a super simple question. Let me  
24 restate this.

25 Do you know what they looked like before? 07:57:26

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1 A. My understanding is that [REDACTED] and all 07:57:27

2 [REDACTED] -- [REDACTED] have  
3 always been [REDACTED]

4 Q. They just have a different -- was it a

5 [REDACTED] 07:57:40

6 A. [REDACTED] has -- has  
7 increased over time, and earlier on it was a  
8 [REDACTED], and now it's more.

9 Q. Do any of the [REDACTED]  
10 indicate anything about the app? For instance, do 07:57:59  
11 certain -- are certain types of [REDACTED] reflective  
12 of the fact that they are [REDACTED]

13 A. [REDACTED] The -- the format of a [REDACTED]  
14 [REDACTED] determine whether or not [REDACTED]  
15 [REDACTED]. However, you could 07:58:22  
16 [REDACTED] is  
17 [REDACTED] based on the [REDACTED]  
18 for example.

19 Q. Does Facebook maintain an index of [REDACTED]  
20 [REDACTED] 07:58:44

21 A. Yes. [REDACTED] in [REDACTED]  
22 [REDACTED]  
23 with it, including the [REDACTED].

24 Q. Does it also have the app developer  
25 associated with it? 07:59:06

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1 A. Can you help me understand what -- what 07:59:11  
2 you mean by "the app developer."

3 Q. Sure.

4 If -- [REDACTED] is associated with an  
5 [REDACTED] is that correct? 07:59:17

6 A. An [REDACTED] uniquely refers [REDACTED]  
7 [REDACTED], yes.

8 Q. What other information is associated with  
9 that [REDACTED] in -- in [REDACTED]

10 A. So the [REDACTED] that would 07:59:38  
11 typically be associated with an [REDACTED] would  
12 include the [REDACTED] of the people who have a role  
13 on the [REDACTED] such as when  
14 the [REDACTED] information about the [REDACTED]

15 [REDACTED] and then a 08:00:05  
16 [REDACTED] I could -- I  
17 could go on for more, but there's a number of  
18 things that would be associated with -- with an [REDACTED]

19 [REDACTED]  
20 Q. Would it also identify whether an [REDACTED] [REDACTED]  
21 [REDACTED] on the platform?

22 A. The answer to that question depends on  
23 the definition of -- [REDACTED] [REDACTED] I -- can  
24 you help me understand what you mean by [REDACTED]  
25 [REDACTED] and then maybe I'll be able to give you a 08:00:38

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1 more accurate answer. 08:00:41

2 Q. Would the information associated with an  
3 [REDACTED] indicate when  
4 an [REDACTED]

5 A. So, again, the answer to that question 08:00:57  
6 somewhat depends on what you mean by [REDACTED]

7 [REDACTED]  
8 Again, I'm trying -- in terms of being  
9 helpful, try and give you my understanding of that.

10 One of the properties of an [REDACTED] its 08:01:11  
11 mode, which at times are called [REDACTED]

12 [REDACTED] And one of the  
13 things that is associated with an [REDACTED] is which  
14 mode it is in. If an [REDACTED]

15 then only people -- users who have been given a 08:01:32  
16 [REDACTED] can [REDACTED]

17 [REDACTED]  
18 So one way of determining [REDACTED]  
19 [REDACTED] is whether or not

20 [REDACTED]. There's other ways, 08:01:48  
21 too, but hopefully that provides some general  
22 information.

23 Q. Is there information associated with an  
24 [REDACTED] that indicates whether an app has been

25 [REDACTED] 08:02:02

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HIGHLY CONFIDENTIAL

1 [REDACTED] or -- 08:02:12

2 actually, let me back up.

3 Can you help me understand what you mean

4 by "[REDACTED]"

5 Q. Sure. I mean it colloquially, but you 08:02:21

6 can -- is there information associated with an [REDACTED]

7 [REDACTED]

8 [REDACTED] or whether an [REDACTED] has to

9 do -- [REDACTED] before it can be out

10 [REDACTED] 08:02:34

11 [REDACTED]

12 MR. SCHWING: Object to form.

13 THE DEPONENT: My understanding is that

14 there will be some information about whether or not

15 [REDACTED] 08:02:53

16 Exactly which systems that -- that information is

17 stored in depends on the -- [REDACTED]

18 and when it was applied.

19 Q. (By Mr. Melamed) I guess I'm asking

20 whether there's a single table that exists -- like 08:03:10

21 what is the general information in the single

22 table, if there is one, that is associated with an

23 [REDACTED]

24 And I think you started to list some of

25 those types of information. I'm just trying to 08:03:23

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HIGHLY CONFIDENTIAL

1 understand if there are additional types of 08:03:24  
2 information.

3 A. Yes. There is a -- [REDACTED]  
4 [REDACTED] and the -- that contains information  
5 about [REDACTED] That table has -- I want to 08:03:36  
6 say it has quite a few columns.

7 I can continue to try to give you some of  
8 the -- the information I think is the more -- the  
9 more I understand -- that I understand to be in  
10 that table. Those would [REDACTED] of 08:03:53  
11 [REDACTED] as opposed to a [REDACTED], along  
12 [REDACTED], which would be contained  
13 in other tables.

14 Q. Would -- how do you refer to the -- I  
15 just want to use the right nomenclature. 08:04:18

16 How do you refer to this primary table of  
17 apps that are associated with a particular -- the  
18 [REDACTED] that we're talking about? Is there a  
19 name for that table?

20 A. So the table I'm -- I'm referring to I 08:04:33  
21 know as [REDACTED]

22 Q. "[REDACTED]"

23 A. [REDACTED]

24 Q. That is a Hive table, correct?

25 A. [REDACTED] 08:04:53

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## HIGHLY CONFIDENTIAL

1 Q. Does -- and do -- when you call it -- 08:04:59  
2 when you talk about this table -- well, do you ever  
3 talk about this table in emails or in conversations  
4 with colleagues?

5 A. It -- it's possible that people have 08:05:14  
6 referred to this table in -- in emails, but...

7 Q. I don't mean -- I'm -- I'm not asking for  
8 a question where asking for memory. I'm just  
9 asking if there's a -- just as the -- we talked  
10 about something called the [REDACTED], which is 08:05:28  
11 actually a slighter longer name, is there a way  
12 that you or your colleagues refer to the  
13 [REDACTED] that is not that full name?

14 A. Not that I can think of now. Not that I  
15 think of now. When you're referring to a specific 08:05:48  
16 table, typically you use the name of the table.

17 Q. Does the [REDACTED] identify the  
18 [REDACTED] who have -- Facebook users that  
19 [REDACTED]?

20 A. There are -- there are tables that I'm 08:06:08  
21 aware of or that I recall exist that include  
22 information about the [REDACTED]  
23 [REDACTED] So those -- those tables exist.

24 I -- I can't be 100 percent confident  
25 whether or not that information is in the -- the 08:06:30

HIGHLY CONFIDENTIAL

1 [REDACTED] 08:06:33

2 Q. Are you confident that it is in another  
3 table?

4 A. I'm confident that there are tables that

5 [REDACTED] in 08:06:45  
6 various ways over time.

7 Q. Do you know -- are any of those not in  
8 the [REDACTED]?

9 A. [REDACTED] in my  
10 understanding, refers to a specific table with a 08:07:09  
11 specific set of fields, and I -- I don't recall  
12 today precisely the full set of fields that that --  
13 that table contains. So -- but I am aware of other  
14 tables existing which include [REDACTED]

15 [REDACTED] 08:07:32

16 Q. And do you recall the names of any of  
17 those other tables that contain information about  
18 [REDACTED]

19 A. I don't recall the name of those -- those  
20 tables precisely, no, but -- but there are -- I 08:07:43  
21 recall having interacted with such tables in the  
22 past.

23 Q. Do you know if there exists something  
24 like a pivot table that collects information  
25 associated with a single app from different Hive 08:08:07

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HIGHLY CONFIDENTIAL

1 tables? 08:08:10

2 MR. SCHWING: Object to form.

3 THE DEPONENT: So Facebook's Hive

4 infrastructure, data infrastructure, [REDACTED]

5 [REDACTED] which [REDACTED] [REDACTED]

6 [REDACTED] and -- and [REDACTED], either on

7 an [REDACTED]

8 [REDACTED].

9 Q. (By Mr. Melamed) Do you know whether

10 data scientists have you ever queried Hive tables 08:08:45

11 so that the information about apps inclusive of [REDACTED]

12 [REDACTED] are in the

13 [REDACTED] are combined with information

14 about the [REDACTED]?

15 MR. SCHWING: Object to form. 08:09:09

16 THE DEPONENT: Yes, I'm aware of tables

17 that exist that [REDACTED] from

18 [REDACTED]

19 [REDACTED]

20 Q. (By Mr. Melamed) And what tables are you 08:09:27

21 aware of that combine that information?

22 A. Again, I -- Facebook's [REDACTED]

23 [REDACTED]

24 [REDACTED] I -- I don't recall the specific names of

25 those tables here and now. So, you know, I'm 08:09:47

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1       afraid -- I'm aware of those tables existing and                     08:09:53  
2       have -- and having had existed in the past, but  
3       I -- I can't recall the specific names of those  
4       tables as we sit here today.

5 Q. If we were to ask you to go back and 08:10:10  
6 identify those tables, would you be able to do so?

7           A.    I'm -- I'm not a data scientist, and I'm  
8   today not working on the platform team directly. I  
9   likely wouldn't have access to -- to the Facebook  
10  Hive tables themselves. I would speak to a data                   08:10:29  
11  scientist on the platform team to understand what  
12  was -- what was available.

13	Q. Which data scientist would you speak to?
----	---

14           A.    I would start with Mark Molaro.

15 Q. How many apps are on Facebook's platform 08:10:57  
16 currently, about?

17           A.     Can you -- I mean, I -- the answer to  
18     that question depends on a number of factors as to  
19     what it means to be an app on -- on Facebook's  
20     platform and whether or not it's active.     Today I                     08:11:19  
21     don't have the precise number of apps that are  
22     available on Facebook's platform.

23 Q. Is one of the pieces of information that  
24 is associated with an app in any Hive table whether  
25 the app is a first-party Facebook app or not? 08:11:39

## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to form. 08:11:50

2 THE DEPONENT: My understanding is that

3 [REDACTED]  
4 [REDACTED]. I

5 assume that information is stored somewhere in 08:12:05

6 Hive, but I couldn't be sure.

7 Q. (By Mr. Melamed) Do you know the time  
8 period for which the method -- the information in  
9 the [REDACTED] is available?

10 A. The [REDACTED] goes back to 2012, in my 08:12:28  
11 understanding.

12 Q. Going back to Exhibit 426, which is the  
13 excerpted ten rows. I'm sorry; it's only nine rows  
14 of the [REDACTED].

15 Column C is the [REDACTED] 08:12:44

16 Do you see that?

17 A. I do see that.

18 Q. And that, as you described it before, is  
19 the atomic element of the piece of code that is

20 used to [REDACTED]; is 08:12:54  
21 that right?

22 A. A method refers to a -- a [REDACTED]  
23 in [REDACTED] that's used to create

24 [REDACTED]

25 Q. Okay. So I asked you before whether 08:13:10

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## HIGHLY CONFIDENTIAL

1 there was a mapping of API requests to a -- method 08:13:13  
2 calls. Am I using the lingo correctly? I don't  
3 mean to be confusing.

4 MR. SCHWING: Object to form.

5 THE DEPONENT: So going back to what I -- 08:13:27  
6 I think I referred to earlier is when an API call  
7 is made, there is a system [REDACTED]

8 [REDACTED] to  
9 create the [REDACTED]. So that's -- that's  
10 how -- that's how the system works. 08:13:48

11 Q. (By Mr. Melamed) Is that system  
12 something that could be produced in this case? Is  
13 that a -- is it a tool that Facebook maintains, or  
14 is it a list, a table?

15 MR. SCHWING: Outside the scope of the 08:14:00  
16 deposition. Object to form.

17 THE DEPONENT: So the way in which an API  
18 request is [REDACTED]  
19 and it's my understanding [REDACTED] to  
20 determine [REDACTED] in response to an 08:14:21  
21 [REDACTED]

22 Q. (By Mr. Melamed) So there's no public  
23 way to identify the API requests that are  
24 associated with the methods that are in rows 2  
25 through 10 in column C of Exhibit 426; is that 08:14:40

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HIGHLY CONFIDENTIAL

1 accurate? 08:14:44

2 MR. SCHWING: Object to form.

3 THE DEPONENT: There is -- you can read

4 some of these entries here and -- and understand

5 [REDACTED] would have been in order to -- 08:14:55

6 to -- to [REDACTED]

7 Q. (By Mr. Melamed) Okay. That's helpful,

8 but it's not an answer to my question, which is --

9 if -- if plaintiffs in this case wanted an index

10 that provided API requests and cross-referenced 08:15:16

11 those API requests to the method so that we could

12 make use of the [REDACTED] is that something

13 that is -- that could -- is that even within the

14 realm of possibility as something that could be

15 produced? 08:15:35

16 MR. SCHWING: It's outside the scope of

17 the deposition. Object to form.

18 THE DEPONENT: I -- I'm not sure I'm an

19 expert in what -- what can be produced or in what

20 form that would be appropriate. If it would help 08:15:50

21 if, we could go through these and I could talk

22 through my understanding of how they [REDACTED]

23 [REDACTED] and if that would be useful, then that

24 might be help you interpret this information.

25 Q. (By Mr. Melamed) Thank you for the 08:16:07

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## HIGHLY CONFIDENTIAL

1 offer. Unfortunately, these are nine rows out of 08:16:07  
2 many, many, many millions and were not selected as  
3 the rows that were the methods -- based on the  
4 methods. They were just a selection of the first  
5 nine rows of a particular document. 08:16:21

6 So we'll have to -- that's something I  
7 think we will have to discuss with counsel.

8 Row -- I'm sorry. Column D has the  
9 header "[REDACTED]"

10 Can you tell me what "[REDACTED]" stands for? 08:16:39

11 A. [REDACTED]

12 Q. And what does "[REDACTED]" mean in this  
13 context?

14 A. [REDACTED] in this context means the [REDACTED]  
15 [REDACTED] to that 08:16:54  
16 [REDACTED] time  
17 window described by the [REDACTED].

18 Q. So to take row 2 as an example, the first  
19 four columns indicate that on -- in the [REDACTED]

20 [REDACTED] an app -- an 08:17:18  
21 application with the [REDACTED] would --  
22 made API requests corresponding to the [REDACTED]  
23 [REDACTED]; is that  
24 accurate?

25 A. A caveat here is that my understanding of 08:17:46



HIGHLY CONFIDENTIAL

1 the [REDACTED] is that this what's known in 08:17:47

2 [REDACTED]

3 [REDACTED] and so it's -- it's a [REDACTED]

4 [REDACTED] but --

5 but may not be [REDACTED]. But it can be 08:18:06

6 assumed to be as [REDACTED].

7 Q. Assumed to be [REDACTED] by whom?

8 A. In general, when -- my understanding is

9 it's -- it's accurate to [REDACTED]

10 [REDACTED] at least, if not more. 08:18:27

11 Q. Do you know -- do you know what -- the

12 reason that it is not [REDACTED] of

13 the value?

14 A. My understanding that that's due to

15 [REDACTED] The [REDACTED] 08:18:50

16 in -- [REDACTED] is --

17 produces a result with -- that's [REDACTED]

18 with [REDACTED].

19 Q. And then column [REDACTED] Do you know

20 what the information reflected in that column 08:19:13

21 means?

22 A. My understanding is this refers to the

23 [REDACTED]

[REDACTED] that were used to make the [REDACTED]

[REDACTED] 08:19:32

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HIGHLY CONFIDENTIAL

1 Q. So for row 2, those 12 requests had a 08:19:33

2 [REDACTED] by that one app for the

3 particular [REDACTED]

4 [REDACTED] were made by a single -- on behalf of a

5 single user; is that accurate? 08:19:51

6 A. That's my understanding of what -- what

7 column B means, yes.

8 Q. Okay. If you look at Column E, row 9.

9 There are other rows that have this information,

10 too, but just for -- for purposes of this 08:20:05

11 discussion, row 9 has [REDACTED] And that app

12 in row 9 during the 24 hour time period on

13 [REDACTED]

14 [REDACTED] but did so on behalf

15 of [REDACTED] 08:20:35

16 Do you see that?

17 A. I do see that.

18 Q. Do you know how that -- how it was [REDACTED]

19 [REDACTED] how that many --

20 Let me rephrase the question. 08:20:42

21 Do you know how an API request could be

22 made, let alone made [REDACTED] without the user

23 having requested it?

24 A. There are --

25 Sorry. Say that again, Austin. 08:21:05

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HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to form. 08:21:07

2 You can go ahead and answer, Mr. Cross.

3 THE DEPONENT: Apps have what's called an

4 [REDACTED] which does not refer to a

5 [REDACTED], and my 08:21:16

6 understanding is that it's likely that those calls

7 were made with an [REDACTED]

8 [REDACTED] I can't 100 percent of that, because

9 I'd need to fully understand the lineage of the

10 data systems, but that's -- that's my understanding 08:21:36

11 of -- of how you would have API requests in here

12 without them being ascribed to a number of users.

13 Q. (By Mr. Melamed) And then column F --

14 and we can refer to return to row 2 for this -- is

15 the -- the header of column F is [REDACTED] 08:21:56

16 Do you know what that stands for?

17 A. That -- that refers to [REDACTED]

18 Q. And what does [REDACTED] mean in

19 this context?

20 A. My understanding is that refers to 08:22:12

21 whether or not [REDACTED]

22 [REDACTED] by the

23 [REDACTED]

24 Q. What makes a [REDACTED]

25 Let me rephrase that. 08:22:27

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## HIGHLY CONFIDENTIAL

1 What does it mean in context of this 08:22:32

2 spreadsheet to call a [REDACTED]

3 A. My understanding is it means that the app

4 [REDACTED]

5 [REDACTED] a 08:22:49

6 [REDACTED]

7 Q. Is it possible to return a response that  
8 does not provide information in response to a  
9 request?

10 Actually, let me -- do you understand 08:23:03

11 what I'm asking with that question? I'm sorry.

12 This is --

13 MR. SCHWING: The question is vague.

14 MR. MELAMED: Yeah. So --

15 MR. SCHWING: If you do know what he 08:23:13

16 means, go ahead. But I don't -- it seems to me

17 there was uncertainty.

18 MR. MELAMED: I know what I intend to

19 mean. I'm not sure I communicated it to you,

20 Simon -- or Mr. Cross. I'm sorry. 08:23:22

21 Q. (By Mr. Melamed) So if you're able to  
22 answer, just state what you think -- the question  
23 you think you're answering and I'll help to  
24 clarify.

25 If you're not able to answer, I'm happy 08:23:31

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## HIGHLY CONFIDENTIAL

1 to clarify. 08:23:33

2 MR. SCHWING: Yeah, I'm going to restate  
3 the objection that it's vague.

4 THE DEPONENT: What I think you mean is  
5 is it possible for the API to -- to return 08:23:52  
6 successful -- to -- for the API request to be  
7 considered successful but return no information?

8 Is that -- is what you're asking? If so --

9 Q. (By Mr. Melamed) Yes. Let's -- let's  
10 say -- let's put a different example on here. 08:24:07

11 Let's say there was an API call made for  
12 your friend's religious and political preferences,  
13 and that API call was well formed, and so it  
14 reflects in this method table in the counts and the  
15 users. And would that -- but you had not provided 08:24:27  
16 access to that information to the app.

17 Would that return has -- be indicated in  
18 the CNT successful as a successful query for that  
19 information?

20 MR. SCHWING: Vague. Incomplete 08:24:46  
21 hypothetical.

22 THE DEPONENT: Yeah, again, the -- a full  
23 answer here like -- might require some -- some --  
24 some digging in exactly how these data pipelines  
25 work. 08:25:07

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HIGHLY CONFIDENTIAL

1                   So -- but -- but my understanding is that                   08:25:07  
2                   [REDACTED] even if  
3                   there was [REDACTED] based on the  
4                   [REDACTED]. As far as  
5                   the API concerned, it was a [REDACTED] and it                   08:25:28  
6                   was [REDACTED], but that response  
7                   being [REDACTED]  
8                   [REDACTED]  
9                   even in -- in the case of [REDACTED]  
10                  Q.     (By Mr. Melamed) Thank you. That's                   08:25:48  
11                  helpful.  
12                  Is there any other information other than  
13                  these columns reflected in the [REDACTED]  
14                  A.     My understanding is -- is this is  
15                  representative of what is stored in -- in the                   08:26:03  
16                  [REDACTED]  
17                  MR. SCHWING: We've been going about an  
18                  hour.  
19                  MR. MELAMED: We can go off the record  
20                  and take a break.   08:26:17  
21                  THE VIDEOGRAPHER: Okay. We're off the  
22                  record. It's 8:26 p.m.  
23                  (Recess taken.)  
24                  THE VIDEOGRAPHER: We're back on the  
25                  record. It's 8:50 p.m.   08:50:30

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) Mr. Cross, are you 08:50:32

2 familiar with the capabilities tool?

3 A. I am familiar with the capabilities tool.

4 Q. What is the capabilities tool?

5 A. The capabilities tool is an internal tool 08:50:44

6 available to Facebook employees which is used to

7 manage capabilities and which apps have access to

8 them.

9 Q. What does it mean to have access to a  
10 capability? 08:51:05

11 A. Excuse me. It means that when an [REDACTED]

12 a specific -- which represents a [REDACTED]

13 [REDACTED] has been granted a capability, then

14 that [REDACTED]

15 [REDACTED] which depends on the capability that's 08:51:29

16 being granted.

17 Q. Is it accurate to say that the capability  
18 is something that is not generally available to all  
19 platform apps?

20 A. Typically capabilities refer to behavior 08:51:46

21 which would not [REDACTED] -- to a

22 Facebook application.

23 Q. Now, are there circumstances where -- let  
24 me withdraw and try of think of another way of  
25 saying it. 08:52:10

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## HIGHLY CONFIDENTIAL

1 And are you familiar with the 08:52:16  
2 capabilities tool as it used at Facebook?

3 A. I am familiar with the capabilities tool  
4 and how it's used at Facebook.

5 Q. When was the capabilities tool instituted 08:52:28  
6 as -- as such?

7 Sorry for the poorly phrased question.  
8 Let me restate that.

9 When did Facebook start using the  
10 capabilities tool? 08:52:41

11 A. My understanding is the capabilities tool  
12 [REDACTED]  
13 or certainly [REDACTED]

14 Q. Did Facebook have any way of tracking  
15 capabilities prior to the time period when the 08:52:57  
16 capability tool was used?

17 A. Before the capability tool existed, there  
18 was another tool which managed some API whitelists,  
19 and that was used to [REDACTED]

20 [REDACTED] 08:53:30

21 Q. And what the name of that tool?

22 A. My understanding is that tool was called  
23 Pearly Gates.

24 Q. P-E-A-R-L-Y Gates?

25 A. P-E-A-R-L-Y, Gates, G-A-T-E-S. 08:53:46



## HIGHLY CONFIDENTIAL

1 Q. Do you know if Facebook still has the 08:53:51  
2 records that were reflected in Pearly Gates or has  
3 the tool?

4 A. My understanding is that that tool was  
5 replaced by the capability tool. I'm -- I'm not 08:54:04  
6 aware as -- whether or not Facebook retains records  
7 from -- from that previous tool.

8 (Exhibit 427 was marked for  
9 identification by the court reporter and is  
10 attached hereto.) 08:54:14

11 MR. MELAMED: So I've marked what's  
12 been -- or I've introduced what's been marked as  
13 Exhibit 427. You're going to see that the  
14 Exhibit Share is unable to preview the file, and  
15 I'm happy to share my screen to show it. 08:54:30

16 Q. (By Mr. Melamed) It is Facebook -- I'm  
17 sorry. The Bates number is FB-CA-MDL-02936298.tsv.  
18 I'll note that the version you're looking at on my  
19 screen says "(2)" because I had downloaded it  
20 earlier, and I'll state for the record that I 08:55:00  
21 haven't made any changes to this other than to wrap  
22 text and expand the columns so that we can see  
23 them.

24 I'll also state for the record that this,  
25 like the [REDACTED] spreadsheet we were looking at 08:55:17

## HIGHLY CONFIDENTIAL

1 before, is an excerpt of a much larger document, so 08:55:19  
2 this is only ten rows, so the column header and  
3 then nine entries. And I just want to do something  
4 similar to what we just did with the [REDACTED]

5 MR. SCHWING: And, Matt, just so I'm 08:55:33  
6 clear -- I appreciate that description. So this  
7 is -- there was a larger spreadsheet, and this is  
8 just the first ten rows of that spreadsheet? You  
9 didn't change the ordering?

10 THE DEPONENT: Correct. I -- that is my 08:55:46  
11 understanding. I'm sorry if we did, but I did not  
12 intend to change any ordering. It's intended to  
13 just reflect --

14 MR. SCHWING: Okay.

15 MR. MELAMED: -- these -- the column 08:55:57  
16 header and then nine -- I think the first nine  
17 rows.

18 Q. (By Mr. Melamed) Mr. Cross, have you  
19 seen -- are you familiar with the content reflected  
20 in this excerpt? 08:56:09

21 A. I -- it looks similar to something I've  
22 reviewed previously. I'm familiar -- I'm familiar  
23 with -- with the content, I think, yes.

24 Q. So counsel has previously identified this  
25 to us as the log table from the capabilities tool. 08:56:40

HIGHLY CONFIDENTIAL

1 Does -- have you heard the phrase "log table" as -- 08:56:44  
2 in this context, in the context of the capabilities  
3 tool?

4 A. Yes, I've heard the phrase "log table" in  
5 the context of the capabilities tool. 08:56:52

6 Q. And what is the log table?

7 A. My understanding is that the log table  
8 [REDACTED] to the  
9 capability tool or to the information within the  
10 capabilities tool over time. 08:57:13

11 Q. Are those [REDACTED] capabilities  
12 themselves?

13 A. So it would -- depends on what you mean  
14 by "to the capabilities." Can you be more  
15 specific? 08:57:33

16 Q. Let me rephrase the question.

17 What are [REDACTED] that are reflected  
18 in this tool?

19 A. So my understanding is there's a --  
20 there's a [REDACTED] that are reflected in 08:57:48  
21 this table, including [REDACTED]

22 [REDACTED] whether or not that  
23 capability -- a given capability is [REDACTED]

24 [REDACTED] whether or not an app [REDACTED]  
25 [REDACTED], and [REDACTED] 08:58:14

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HIGHLY CONFIDENTIAL

1 about capabilities as stored in the capability 08:58:19  
2 tool.

3 Q. If you look at column A, you see it is --  
4 has the header "[REDACTED]"

5 A. Yeah. 08:58:31

6 Q. Do you know what that [REDACTED] pertains  
7 to? What is it identifying?

8 A. My understanding is that -- sorry. My  
9 understanding is that refers to the [REDACTED]

10 [REDACTED] the capability log table. 08:58:45

11 Q. And what -- do you know what that [REDACTED] is  
12 associated with?

13 A. My understanding --

14 Q. It -- go ahead. I'm sorry.

15 A. My understanding is it's just the [REDACTED] [REDACTED]

16 [REDACTED] Every time a [REDACTED]  
17 added, a [REDACTED]

18 Q. And when you say "a [REDACTED]," are  
19 you referring to a log entry in this table?

20 MR. MELAMED: Mr. Garrie, your audio is 08:59:21  
21 on.

22 If that happens again, we can go off the  
23 record really quickly.

24 Q. (By Mr. Melamed) Is the [REDACTED] something

25 that is ascribed to -- is there a [REDACTED] ascribed 08:59:45

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1 to each [REDACTED]? 08:59:49

2 A. My understanding is every entry added to  
3 the log is given to a [REDACTED] that uniquely  
4 represents that change event.

5 Q. And the [REDACTED] -- your understanding is the 09:00:05  
6 [REDACTED] is not [REDACTED] is that  
7 correct?

8 A. That's correct. My understanding is [REDACTED]  
9 refers to a -- to an [REDACTED].

10 Q. So just to make sure I understand, if we 09:00:21  
11 had the entirety of the log here and it was however  
12 many rows, there should be that many [REDACTED],  
13 i.e., one for each row?

14 A. That's my understanding of -- of what [REDACTED]  
15 mean in this context, yes. 09:00:38

16 Q. Okay. And what does app -- if you look  
17 at column B, it says [REDACTED]

18 Do you know what that means in the  
19 context?

20 A. My understanding is that that means where 09:00:50  
21 the [REDACTED] is -- is specific [REDACTED]  
[REDACTED] in some way, then the [REDACTED] will be reflected  
23 in that column.

24 Q. And what do you mean by "[REDACTED]"  
[REDACTED]? 09:01:02

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1 A. So, for example, there are entries in 09:01:02  
2 here which relate to a [REDACTED]  
3 [REDACTED]. That would be a row representing the  
4 [REDACTED] That would not  
5 be a [REDACTED] 09:01:22  
6 therefore, the [REDACTED] would not be  
7 provided.

8 An alternative example is when a  
9 capability is [REDACTED] from an  
10 app. That would be a [REDACTED], as I understand 09:01:42  
11 it, that would be [REDACTED] and  
12 therefore the [REDACTED] would be in that column for  
13 that entry.

14 Q. So if the capability was [REDACTED]  
15 [REDACTED] it should be reflected in 09:01:55  
16 column B; is that accurate?

17 A. That -- that -- the -- it's hard to  
18 answer that question specifically. There were ways  
19 that, in the past, [REDACTED]  
20 [REDACTED], which would contain a number of 09:02:26  
21 applications, and in those cases it's likely that  
22 what would be logged is the fact that the  
23 [REDACTED] and  
24 not necessarily to -- [REDACTED]

25 [REDACTED] 09:02:45

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1 Q. Would -- do you know if [REDACTED] would ever 09:02:49

2 be indicated as applying to more than [REDACTED]

3 For instance, could there be an entry in the [REDACTED]

4 column had [REDACTED] in it if a log change affected

5 those [REDACTED] 09:03:05

6 A. My understanding is that the log would

7 only -- that column would only ever include [REDACTED]

8 [REDACTED]

9 Q. Column C says [REDACTED]

10 Do you see that? 09:03:22

11 A. I do see that.

12 Q. Do you know what those [REDACTED]

13 A. Those [REDACTED]

14 depending on the action that the row represents.

15 So the -- the notes are [REDACTED] -- 09:03:37

16 [REDACTED] of -- of [REDACTED] that

17 was [REDACTED]

18 Q. And who, as a general matter, by the

19 group of people, not the individuals, but who was

20 responsible for [REDACTED] 09:04:02

21 A. My understanding is that the [REDACTED]

22 [REDACTED] when a [REDACTED]

23 [REDACTED] Therefore, the [REDACTED]

24 [REDACTED] for the capability tool are responsible

25 [REDACTED] 09:04:21

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1 Q. The [REDACTED] is 09:04:25

2 [REDACTED]

3 [REDACTED] my understanding. The -- the

4 [REDACTED] based on the

5 information and [REDACTED] to the 09:04:40

6 capability tool at the time.

7 Q. And column D says [REDACTED]

8 Do you know what that is?

9 A. [REDACTED] refers to the n [REDACTED]

10 [REDACTED] 09:04:57

11 Q. And column E is [REDACTED]

12 Do you know what the [REDACTED] means?

13 A. Yes. The capability tool at one time had

14 the [REDACTED] to

15 be stored, so this would allow a [REDACTED] 09:05:28

16 [REDACTED] -- a set -- sorry --

17 a [REDACTED] to a [REDACTED]

18 [REDACTED] via the group.

19 Q. You said, "at one time." Are [REDACTED]

20 [REDACTED] no longer -- let me 09:05:54

21 rephrase.

22 Does Facebook continue to [REDACTED]

23 [REDACTED] together like this?

24 A. My understanding is that the tool has

25 moved to [REDACTED] to 09:06:08

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1 [REDACTED] to 09:06:12

2 capability.

3 Q. Do you know when that change was made?

4 A. I don't know specifically when that

5 change was made. It's likely that that was a -- a 09:06:26

6 changeover period of time as the migration took

7 place. I think it was in the last like two or

8 three years or so.

9 Q. So I'm sorry. Just to be clear, that

10 [REDACTED] or from where 09:06:47

11 [REDACTED] were possible to an

12 [REDACTED] to a

13 [REDACTED] happened over the last few years; is

14 that right?

15 A. I'm not sure how long it took to 09:07:07

16 transition from having [REDACTED] via

17 [REDACTED]. I'm not sure how

18 long the transition period took. My understanding

19 is that that transition took place sometime in the

20 last two or three years. 09:07:22

21 Q. So do you know the reason that Facebook  
22 initiated that transition?

23 A. My understanding is it was much simpler

24 to [REDACTED] to which

25 [REDACTED] 09:07:41

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## HIGHLY CONFIDENTIAL

1 Q. So it was more difficult to understand 09:07:50  
2 which [REDACTED] to [REDACTED] when  
3 [REDACTED]; is that  
4 correct?

5 A. The -- 09:08:03

6 MR. MELAMED: Sorry.

7 MR. SCHWING: Object to form.

8 But go ahead, if you can answer.

9 THE DEPONENT: My understanding is that  
10 by [REDACTED], additional 09:08:14  
11 processing is required to -- t [REDACTED]  
12 [REDACTED] at a given time.

13 Q. (By Mr. Melamed) When [REDACTED]  
14 [REDACTED] was it possible to  
15 [REDACTED] that had access to each 09:08:34  
16 [REDACTED]?

17 A. Yes, at -- at -- exactly how that's  
18 represented in the logs, yes. In order for  
19 capabilities to function, it was possible for --  
20 [REDACTED] had 09:09:00  
21 access to a [REDACTED].

22 Q. Was it possible for employees at Facebook  
23 to [REDACTED] had access to which  
24 [REDACTED] during the time when  
25 [REDACTED] 09:09:19

## HIGHLY CONFIDENTIAL

1 A. Yes. The capability tool would have 09:09:25  
2 allowed employees to [REDACTED] an app  
3 had and [REDACTED] or  
4 [REDACTED].

5 Q. And that is not -- that information is 09:09:37  
6 not reflected in this table; is that correct?

7 MR. SCHWING: Object to form.

8 THE DEPONENT: This table represents  
9 [REDACTED] to the capability tool at --  
10 at a given time. And so it would indicate when 09:09:54  
11 changes were made to [REDACTED]  
12 [REDACTED].

13 Q. (By Mr. Melamed) If you wanted to  
14 understand which capabilities an app had access to  
15 during the -- for the whole duration of time that 09:10:26  
16 the capabilities tool was in use, would you use  
17 this spreadsheet?

18 A. My understanding is that [REDACTED]  
19 [REDACTED] had  
20 [REDACTED] at any -- at any given 09:10:48  
21 time.

22 Q. And column F has the header

23 [REDACTED]

24 Mr. Cross, do you see that column F has  
25 the header [REDACTED] 09:11:14

## HIGHLY CONFIDENTIAL

1 A. Yes, I do. 09:11:17

2 Q. And then there are what looks like  
3 numeric entries in the cells under column F,  
4 correct?

5 A. That's correct. 09:11:30

6 Q. What do those numbers represents?

7 A. My understanding is that those refer to  
8 [REDACTED] who initiated the  
9 change in the log.

10 Q. Does Facebook maintain a separate table 09:11:53  
11 that identifies the [REDACTED] associated with  
12 the employee name?

13 A. Facebook would have a way of knowing for  
14 a given [REDACTED] who that referred to.

15 Q. Do you see column G is [REDACTED]? I'm 09:12:25  
16 going to scroll over just a few so you can see the  
17 remainder for context.

18 Do you see column G has [REDACTED] -- as  
19 having [REDACTED]

20 A. I do see that. 09:12:35

21 Q. What is the information reflected in  
22 column G in the [REDACTED]

23 A. My understanding is that this refers to  
24 [REDACTED], so [REDACTED] that the action  
25 reflected in the log took place. 09:12:55

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## HIGHLY CONFIDENTIAL

1 Q. Do you see anything in this log -- and 09:13:02  
2 I'm happy to scroll back; just ask me to do so --  
3 that reflects the date on which any of these  
4 actions took place?

5 A. [REDACTED]. 09:13:13

6 Q. Okay. Can you explain how -- let's look  
7 at row 2. I just don't understand.

8 What [REDACTED]

9 [REDACTED]

10 A. So that's -- my understanding is that's 09:13:32  
11 an Excel date and time for my team bug. If you  
12 look at the raw value of the cell, further up,  
13 you'll see the "un-Excelified" version.

14 Q. You're looking in the -- where I've just  
15 highlighted in the -- in the field next to the 09:13:50  
16 function?

17 A. That's correct.

18 Q. So the [REDACTED]

19 [REDACTED]. That's -- all I've done is  
20 highlighted this cell. 09:14:13

21 A. Sorry. Yes. My understanding is that  
22 that refers to [REDACTED]

23 [REDACTED]

24 Q. Column H has the header "[REDACTED]"

25 Do you see that? 09:14:33

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## HIGHLY CONFIDENTIAL

1 A. I do. 09:14:34

2 Q. What does [REDACTED] reflect?

3 A. My understanding is that there's a [REDACTED]  
[REDACTED] each of which is identified by

5 an [REDACTED], and that refers to the 09:14:50

6 [REDACTED] at  
7 this time.

8 Q. Do you know how many [REDACTED] there  
9 are?

10 A. I think there's [REDACTED]. In other 09:15:11  
11 words -- I assume there was [REDACTED] I don't  
12 know the full -- the full number, I'm afraid, of  
13 exactly of -- exactly which action types consist.

14 Q. Do you know if the numbering of [REDACTED]  
[REDACTED] is sequential? 09:15:32

16 A. My understanding of it that it is  
17 enumerated, but there may be missing -- missing  
18 [REDACTED] where the engineer created one but  
19 didn't go on to subsequently use it, for example.

20 MR. MELAMED: I'll state for the record 09:16:03  
21 that counsel has given us at least a partial list  
22 of [REDACTED] so I'll just -- we'll go back if  
23 we need to.

24 Q. (By Mr. Melamed) Column I -- I'm  
25 sorry -- is the task ID. [REDACTED] 09:16:16

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1 Can you tell me what "task\_ID" stands 09:16:22

2 for?

3 A. "[REDACTED] refers to the [REDACTED] for a  
4 [REDACTED] t system.

5 Q. If you wanted to look up a [REDACTED] based on 09:16:39  
6 a [REDACTED], could you do  
7 so?

8 A. I could attempt to do so, but whether or  
9 not I would be able to see the contents of the [REDACTED]  
10 would depend on internal privacy and accessible 09:16:53  
11 rules.

12 Q. Are all of the [REDACTED]  
13 system retained?

14 A. I don't know for certain whether or not  
15 they are retained forever, no. 09:17:10

16 Q. Do you know whether all of the [REDACTED] that  
17 are reflected in this worksheet, which is the log  
18 table and the capabilities tool, have been  
19 retained?

20 A. Again, I'm not aware of the specific data 09:17:33  
21 retention mechanisms for [REDACTED] -- a [REDACTED]  
22 [REDACTED]

23 Q. Are you familiar with how to search in  
24 the [REDACTED] I'm sorry -- [REDACTED]

25 A. I am familiar of how to look up [REDACTED] 09:17:53

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1 [REDACTED] 09:17:57

2 Q. Can you look up more than [REDACTED] a  
3 time? For instance, can you enter a [REDACTED]  
4 [REDACTED] and query to see whether each of those exist at  
5 the same time? 09:18:11

6 MR. SCHWING: Object to form.

7 THE DEPONENT: The [REDACTED] has a -- has  
8 a way of searching by several dimensions. I think  
9 it's possible to search for [REDACTED] at  
10 the same time, but the -- the precise number of 09:18:28  
11 task IDs that that search system would accept is --  
12 is not something I'm aware of.

13 Q. (By Mr. Melamed) Column J is the

14 [REDACTED]  
15 Can you tell me what that header 09:18:51  
16 references?

17 A. So today Facebook has a process called  
18 [REDACTED] which exists to [REDACTED]  
19 and [REDACTED] and who -- [REDACTED]  
20 [REDACTED] 09:19:15

21 My understanding is that that column  
22 reaches an [REDACTED]

23 Q. What information is reflect in the [REDACTED]  
24 [REDACTED] that is not reflected in the  
25 capabilities tool, if anything? 09:19:41

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## HIGHLY CONFIDENTIAL

1 A. So the capabilities tool exists today to 09:19:46

2 [REDACTED]

3 [REDACTED] The [REDACTED] to govern

4 the process by which capabilities are [REDACTED]

5 [REDACTED], and the tool would therefore reflect 09:20:07

6 the -- the information as to [REDACTED]

7 [REDACTED] to a specific

8 application.

9 Q. What form does the [REDACTED] exist in?

10 A. My understanding is that the [REDACTED] 09:20:34

11 [REDACTED] uses an internal tool called

12 Launch Manager.

13 Q. Do you know when Launch Manager first

14 started being used?

15 A. Sorry. Launch Manager started being used 09:21:01

16 in -- in which context?

17 Q. Let -- let me back up and ask a predicate

18 question.

19 Is Launch -- is Launch Manager used for

20 anything other than the process by which 09:21:17

21 capabilities are granted to application and

22 information as to why a capability existed or was

23 granted for a particular application?

24 A. The Launch Manager tool is used

25 internally at Facebook to operationalize the 09:21:40

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1        companywide [REDACTED] 09:21:42

2            Q.    The Launch Manager tool is used for more  
3        than -- is the -- is reflected in this log; is that  
4        right?

5            A.    The Launch Manager tool is -- is used in 09:22:05

6        internally to manage Facebook's -- the companywide

7        [REDACTED] and then it's also used to

8        manage the [REDACTED]

9            Q.    In what form does that tool exist? Is it  
10       a database that is accessed by internal employees 09:22:27  
11       or spreadsheets? Something else?

12          A.    It's -- it's a website that's available  
13       to Facebook employees.

14          Q.    And is it backed up by a database? Is it  
15       a website interface to a database? 09:22:43

16          A.    I'm not an expert in how the -- the tool  
17       is structured, but from -- from my experience in  
18       these matters, the -- yes, the -- the -- the  
19       website would be a front-end onto some form of  
20       database. 09:23:02

21          Q.    Do you know whether reports can be  
22       generated from the website?

23          A.    I don't know exactly what is -- what is  
24       possible to be generated by the -- the  
25       Launch Manager tool. It's likely the view that I 09:23:24

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1 have as -- as a product manager differs from the 09:23:27  
2 views that other employees have.

3 Q. How long has the Launch Manager been used  
4 at Facebook?

5 A. I'm not -- the Launch Manager tool is -- 09:23:47  
6 is something that's existed for several years. I'm  
7 not confident in the -- in the -- in the date from  
8 which it first started being used internally, but  
9 it's been a tool that's been in use for several  
10 years. 09:24:03

11 Q. Is it a tool that is still in use?

12 A. Yes, the Launch Manager tool is -- is  
13 still in use.

14 Q. You see column K identifies the

15 [REDACTED] 09:24:25

16 A. I see that.

17 Q. Do you know what information was  
18 reflected when that column was filled in?

19 A. I'm not actually sure what that column  
20 exists to -- to track, I'm afraid. 09:24:44

21 Q. The -- so the information counsel  
22 provided to us, that field is described as saying

23 [REDACTED]

[REDACTED]

[REDACTED]

09:25:08

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## HIGHLY CONFIDENTIAL

1 Do you have any reason to doubt that 09:25:09  
2 description of what's contained in this -- of what  
3 would be contained in this column if it were  
4 recorded?

5 A. I have no reason to doubt to -- to doubt 09:25:19  
6 that description.

7 Q. The description says it's [REDACTED]  
8 [REDACTED] And I'm  
9 excerpting there.

10 But do you know what is meant by 09:25:34  
11 [REDACTED] that context?

12 A. I'm not entirely sure exactly what --  
13 what it means by [REDACTED] in this  
14 context.

15 (Exhibit 428 was marked for 09:25:48  
16 identification by the court reporter and is  
17 attached hereto.)

18 MR. MELAMED: I have introduced what's  
19 been marked as Exhibit 428. This one you should be  
20 able to open in your Exhibit Share, but I will 09:26:45  
21 share my screen in a second.

22 While you're pulling it up, Exhibit 428  
23 is, again, an excerpt of this spreadsheet provided  
24 by Facebook at FB-CA-MDL-02936296.

25 Q. (By Mr. Melamed) And we went through the 09:27:17

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1 same process here. It's not a -- you know, it's a 09:27:18  
2 fairly random selection of the first several rows  
3 just so we can discuss the information that's  
4 provided on this spreadsheet.

5 And for ease of legibility, I'm going to 09:27:29  
6 stretch the columns out a little bit and share my  
7 screen.

8 While I'm doing this, have -- are you  
9 familiar with this document, Mr. Cross?

10 A. I am familiar with this document. 09:27:47

11 Q. And you reviewed this in preparation for  
12 testifying today?

13 A. I did.

14 Q. What does this document reflect? What is  
15 your understanding of the information that this 09:27:59  
16 document reflects?

17 A. My understanding is that this document  
18 reflects when -- an [REDACTED] and the  
19 capability and when the [REDACTED]  
20 [REDACTED] to that capability and when the app [REDACTED] 09:28:21  
21 [REDACTED] that capability.

22 Q. And do you know if this is a historical  
23 record?

24 MR. SCHWING: Object to form.

25 Q. (By Mr. Melamed) I can clarify if you 09:28:44

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1 need me to. 09:28:45

2 What I'm asking is do you know if this

3 reflect the -- the -- when apps were [REDACTED]

4 [REDACTED] and when they [REDACTED] from

5 the onset of the time the capabilities tool was 09:29:00

6 used?

7 A. Sorry. Excuse me.

8 My -- my understanding is that this

9 reflects when an app [REDACTED]

10 [REDACTED] the capabilities tool and when the 09:29:23

11 [REDACTED] by the

12 capability tool.

13 Q. And it's your understanding that it

14 includes that information from -- for the entirety

15 of the time the capabilities tool was in use? 09:29:39

16 A. This -- this excerpt I'm seeing doesn't,

17 but the -- the original document -- I don't want

18 to -- determine what it was -- exactly how it was

19 produced and what the limits of that -- of that --

20 of that file are. That would depend on when it was 09:30:08

21 produced, you see, and what data was available at

22 the time it was produced.

23 Q. I can tell you I understand why you're

24 saying that. I don't mean to be tricking you here.

25 I can tell you it was produced several 09:30:26

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1 months ago. I can't -- I'm not sure of the exact 09:30:30  
2 date, but I believe it was in April of this year,  
3 and that the -- the term -- that the file itself  
4 was voluminous, so large that it made it either  
5 impossible or wholly impracticable to open on 09:30:44  
6 the -- on an individual's computer.

7 I don't know if that helps clarify your  
8 answer, but I -- I -- if it does, please let me  
9 know. If not, you know, I'm happy to ask that  
10 question after you had to time to review the 09:31:01  
11 document as it was produced.

12 A. My assumption is if it's a large document  
13 that it -- that it would be -- it would go back  
14 in -- in time a long way, but exactly whether or  
15 not that captures the -- the -- the full extent of 09:31:25  
16 the capability tool being in use, it likely depends  
17 on when the -- the logging for the capability tool  
18 was -- was added.

19 Q. So let's go through the same exercise  
20 with this spreadsheet. 09:31:45

21 There are -- it looks like columns A  
22 through K in this spreadsheet. And, again, this is  
23 an excerpt of the column header and the first nine  
24 rows below that column header.

25 Column A is tabled "[REDACTED]" 09:32:01

## HIGHLY CONFIDENTIAL

1 Do you know what "ID" means in this 09:32:03  
2 context?  
3 A. My understanding is that that refers to  
4 a -- an [REDACTED]  
5 Q. And the next -- each of these -- I'm 09:32:27  
6 sorry. For instance, row 2, 145330, would reflect  
7 an [REDACTED] I could  
8 go to that [REDACTED] and --  
9 and be taken to a row; is that correct?  
10 A. That's -- that's my understanding. 09:32:48  
11 Q. Before we go on, is this the way that --  
12 is this the -- what Facebook employees see when  
13 they use the capability -- capabilities tool  
14 internally?  
15 A. No. When Facebook employees use the 09:33:09  
16 capability tool, they're using a website  
17 internally, which displays information.  
18 Q. So they're not seeing -- seeing Excel  
19 spreadsheets of the information; is that -- they  
20 see something different? 09:33:29  
21 A. When employees are using the capability  
22 tool, they're -- they're -- they're generally using  
23 a website which includes a bunch of information,  
24 sometimes in tabular form, sometimes in other form.  
25 Typically the employees would -- wouldn't use an 09:33:47

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1 Excel spreadsheet. 09:33:50

2 Q. For column B, it's [REDACTED] and then it's

3 a [REDACTED]

4 Do you know what that [REDACTED]

5 reflects? 09:34:08

6 A. That [REDACTED] refers to an [REDACTED]

7 [REDACTED]

8 Q. What does the [REDACTED]

9 [REDACTED] refer to -- what kind of information is

10 that [REDACTED] 09:34:30

11 A. I don't have access to -- to -- to

12 exactly what that information is due to Facebook's

13 internal privacy rules.

14 Q. Do you know the type of information it

15 would be identifying? 09:34:43

16 A. I'm not sure of the type of information

17 that's been identified. Potentially maybe an

18 explanation of that has already been provided as --

19 as part of the Facebook's responses.

20 Q. Column has [REDACTED] 09:35:15

21 Do you know what the information is in

22 [REDACTED]

23 A. Yes. That refers to the [REDACTED] or

24 [REDACTED] We

25 previously talked about this earlier in the 09:35:33

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1 deposition. 09:35:35

2 Q. And column D reflects [REDACTED]

3 Do you know what that information is?

4 A. That refers to an [REDACTED] which represents a

5 [REDACTED] within the capability tool. 09:35:52

6 Q. And column E is [REDACTED] It's

7 a [REDACTED]

8 Do you know what the [REDACTED] is?

9 A. That will be the [REDACTED]

10 [REDACTED] as referenced in Facebook's Graph 09:36:16

11 database.

12 I'm sorry. Let -- let me clarify that.

13 I'll use different terms.

14 "[REDACTED] is -- we talked about this earlier

15 in terms of [REDACTED] 09:36:33

16 When you see "[REDACTED] that refers to an [REDACTED]

17 [REDACTED]

18 Q. Is there any relationship between the

19 information in the capability\_ID and the

20 capability\_FBID? 09:36:54

21 A. My understanding is that one is the [REDACTED]

22 of -- of the [REDACTED] and the

23 other is the [REDACTED] as stored in the

24 capability tool. For a given capability, those two

25 values should be the same. 09:37:13

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1                   Sorry. Not the same value. For a given                   09:37:16

2                   capability, they will always have the same

3                   [REDACTED] and always have the same [REDACTED]

4                   [REDACTED]

5                   Q. There should be a one-to-one correlation                   09:37:29

6                   where each [REDACTED] has [REDACTED]

7                   and each is associated only with that other

8                   specific corollary; is that correct?

9                   A. That's my understanding of how those two  
10                  fields work, yes.   09:37:45

11                  Q. Column F is [REDACTED] and then  
12                  it's a [REDACTED]

13                  Do you know what [REDACTED] is?

14                  A. My understanding is that that refers to  
15                  an ID in the capability tool log. That -- that                   09:38:04  
16                  refers to when the capability was granted to the  
17                  application.

18                  Q. That [REDACTED] It is  
19                  associated with an [REDACTED] that

20                  [REDACTED]   09:38:33

21                  A. That number, as I understand it,  
22                  indicates a -- a [REDACTED], and that row  
23                  may contain [REDACTED]

24                  Q. I'm just trying to understand your  
25                  testimony about what this column -- the information           09:38:54

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1 in this column. 09:38:57

2 You said it refers to when the capability

3 [REDACTED] and -- and by

4 [REDACTED] do you mean the -- [REDACTED] the

5 [REDACTED] the application? 09:39:10

6 A. Sorry. Let me -- let me reframe.

7 My understanding is that [REDACTED] refers to

8 a [REDACTED] in the [REDACTED]

9 [REDACTED] that -- that will contain

10 information about the -- that will refer to a [REDACTED] [REDACTED]

11 [REDACTED] the capability was

12 [REDACTED]

13 Q. It's a cross-reference to another source

14 that [REDACTED]

15 [REDACTED] 09:39:55

16 A. That's my understanding. It's a

17 [REDACTED]

18 Q. Column G is [REDACTED] and it appears

19 to include a [REDACTED]

20 Do you know what [REDACTED] [REDACTED]

21 [REDACTED] reflect?

22 A. My understanding is that it means the

23 [REDACTED] to

24 the application.

25 Q. Is that information any different than 09:40:26

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1 the information that is cross-referenced by the 09:40:29  
2 number in column F?

3 A. I can't say for certain without knowing  
4 the query which produced this table. My  
5 understanding, though, is that that represents the 09:40:46  
6 [REDACTED]  
7 to the application.

8 Q. You referenced the query that created  
9 this table. Do you know if this table was created  
10 for purposes of production in this case? 09:40:59

11 A. I'm not -- I don't know how this table  
12 was -- was created and under what -- what  
13 circumstances.

14 Q. And I know you don't have the full table  
15 in front of you, but is it your understanding that 09:41:28  
16 the full -- so file at 02936296 contains all of the  
17 information that is in the capabilities grants  
18 table?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: Sorry. What do you mean 09:41:56  
21 by "the [REDACTED]"

22 Q. (By Mr. Melamed) Thank you. That's a --  
23 that's a good clarifying question.

24 Counsel has reflected in communications  
25 to plaintiffs that this file is the [REDACTED] 09:42:07

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1 [REDACTED] . 09:42:09

2 Is that -- do you understand this to  
3 reflect a different -- to reflect a different type  
4 of information?

5 MR. SCHWING: Object to form. 09:42:25

6 THE DEPONENT: So my understanding is  
7 that this -- this table reflects the [REDACTED]

8 [REDACTED] -- to

9 [REDACTED] .

10 Q. (By Mr. Melamed) Is it your 09:42:49  
11 understanding that -- or let me withdraw that.

12 Do you have any understanding whether the  
13 full Excel spreadsheet that was produced to  
14 plaintiffs reflects all [REDACTED] and

15 [REDACTED] 09:43:04  
16 that exist within the capabilities tool?

17 A. My understanding is that -- is that that  
18 table contains the -- the full list of -- of  
19 [REDACTED] as stored in the capabilities  
20 tool. 09:43:26

21 Q. Heading to columns -- columns H is N --  
22 the header on the column is [REDACTED] and it  
23 has a [REDACTED]

24 Do you know what that [REDACTED]  
25 reflects? 09:43:47

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1 A. My understanding is it's similar to the 09:43:52  
2 [REDACTED] and it refers to a [REDACTED]  
3 [REDACTED] is indicative of the  
4 [REDACTED] from the application.

5 Q. And column I is [REDACTED] and the 09:44:13  
6 entries appear to be a -- [REDACTED]  
7 Do you understand what that [REDACTED]  
8 reflects?

9 A. I understand that that [REDACTED]  
10 reflects the -- the -- the [REDACTED] as when 09:44:29  
11 the [REDACTED] from the given  
12 application.

13 Q. And so if there is [REDACTED] and  
14 [REDACTED] such as in row 4, does that  
15 indicate that the capability is [REDACTED] 09:44:52  
16 that application?

17 A. My understanding is that that means that  
18 there is [REDACTED] as to that app [REDACTED]  
19 [REDACTED] -- sorry -- that there is  
20 [REDACTED] as to if the capability [REDACTED]  
21 [REDACTED] and therefore  
22 [REDACTED] to  
23 the capability at the time the data was pulled.

24 Q. Column J has the header [REDACTED]  
25 and -- well, where there is an entry, it reflects 09:45:37

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1 what appears to be a [REDACTED] 09:45:44

2 Do you know what [REDACTED] means in  
3 this context, what information is reflected in the  
4 [REDACTED] in the column?

5 A. My understanding is that today when 09:46:00

6 [REDACTED] to applications, they by  
7 default [REDACTED]

8 [REDACTED] and this would indicate [REDACTED]

9 [REDACTED] from the application

10 unless some action is taken. 09:46:25

11 Q. If there is a blank entry -- so, for  
12 instance, in row 4 -- does that indicate that there  
13 is [REDACTED] for that [REDACTED]

14 [REDACTED]

15 A. I can't be 100 percent certain as -- as 09:46:47

16 to exactly what the [REDACTED]  
17 means. It's possible, for example, that the tool  
18 will -- will [REDACTED]  
19 sometime [REDACTED] even if there was no

20 information in the [REDACTED] 09:47:07

21 Q. Do you know that the tool [REDACTED]  
22 [REDACTED] if there is no  
23 entry in the [REDACTED]

24 A. I'm -- I'm not aware of the specific and  
25 complete behavior of how that works. My 09:47:32

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1 understanding is that today if an application is 09:47:36

2 [REDACTED], that will -- the capability

3 [REDACTED] unless

4 someone at Facebook takes an [REDACTED]

5 Q. You said "today," the circumstances that 09:47:57

6 exists today is that if an application is [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 Was there was a time in the past when a

10 [REDACTED] [REDACTED]

11 [REDACTED] in this context to an app?

12 A. Earlier in the history of the capability

13 tool, [REDACTED]

14 [REDACTED] to an application, that

15 [REDACTED] to the application 09:48:33

16 unless someone [REDACTED]

17 Q. When did Facebook start -- start the

18 process whereby if a capability -- [REDACTED]

19 [REDACTED] to an application, it

20 [REDACTED] for that [REDACTED] [REDACTED]

21 [REDACTED] for that application?

22 A. That process started happening sometime

23 in 2018, 2019.

24 Q. Do you know why Facebook started that

25 process in 2018 or 2019? 09:49:17

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A. My understanding is as part of the API XFN process and redesigning how apps got access to capabilities, that -- that was one of the features added to [REDACTED] the set of capabilities that apps have access to.

6 Q. Do you know why Facebook redesigned the  
7 way that apps have access to capabilities around  
8 that time?

9	A. It was part of a -- a -- a set of	
10	measures introduced in 2018 and 2019 to -- to	09:50:12
11	improve their methods by which APIs were developed	
12	inside Facebook.	

13 Q. Do you know why those measures were  
14 initiated in 2018 or 2019 to improve the methods by  
15 which APIs were developed inside Facebook? 09:50:35

16           A.    My understanding is that these processes  
17       were developed in response to concerns raised as  
18       part of the Cambridge Analytica situation and --  
19       and [REDACTED]

20 Q. Do you know which [REDACTED] 09:51:01

21 you're referencing?

22 Or let me withdraw that.

23 Do you know the date of the [REDACTED]  
24 [REDACTED] you're referencing?

25	A. I don't, I'm afraid.	09:51:13
----	-------------------------	----------

## HIGHLY CONFIDENTIAL

1 Q. Do you know who would know? 09:51:17

2 A. I -- I -- I don't know specifically  
3 who -- who was involved in the starting of the API  
4 or the designing of the API XFN process, but...

5 Yeah. So I don't know the name of -- of 09:51:39  
6 the person or people that were specifically  
7 responsible for designing these two processes.

8 Q. Turning to the spreadsheet in Exhibit  
9 428, in column K, the header is [REDACTED]

10 Do you know what [REDACTED] 09:52:00  
11 indicates?

12 A. My understanding that refers to a setting  
13 that determines whether or not a capability should  
14 be [REDACTED] if -- if the

15 [REDACTED] 09:52:20

16 Q. But do you know what values could be  
17 entered in the field in column K?

18 A. My understanding is that would be a

19 [REDACTED]

20 Q. Can you explain what a [REDACTED] is and 09:52:49  
21 then explain what a [REDACTED] is.

22 A. So [REDACTED] and [REDACTED]  
23 means that that field may also be [REDACTED]

24 Q. And what would a one indicate in "[REDACTED]"

25 [REDACTED] 09:53:07

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1 A. My understanding is that a [REDACTED] 09:53:09

2 would mean that the system which [REDACTED]

3 [REDACTED] from apps [REDACTED]

4 [REDACTED] from an app

5 [REDACTED] 09:53:24

6 Q. And do you know what a [REDACTED] would mean?

7 A. I don't know what a [REDACTED] would -- would  
8 mean. My understanding is that it's equivalent to

9 [REDACTED]

10 Q. And what would a [REDACTED] mean? 09:53:40

11 A. It would mean that the system which

12 [REDACTED] from apps if they're not

13 [REDACTED] within a time period should

14 [REDACTED]

15 Q. And by [REDACTED] you mean a [REDACTED] in 09:54:01  
16 the field?

17 A. That's correct.

18 Q. So each of the nine rows here that I've  
19 just highlighted are [REDACTED] is that correct?

20 A. That's my understanding, yes. 09:54:18

21 MR. MELAMED: Let's go off the record.

22 THE VIDEOGRAPHER: Okay. We're off the  
23 record. It's 9:54 p.m.

24 (TIME NOTED: 9:54 p.m.)

25 ---o0o---

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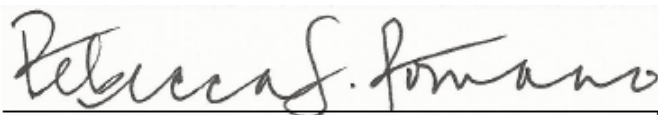
1 I, Rebecca L. Romano, a Registered  
2 Professional Reporter, Certified Shorthand  
3 Reporter, Certified Court Reporter, do hereby  
4 certify:

5 That the foregoing proceedings were taken  
6 before me remotely at the time and place herein set  
7 forth; that any deponents in the foregoing  
8 proceedings, prior to testifying, were administered  
9 an oath; that a record of the proceedings was made  
10 by me using machine shorthand which was thereafter  
11 transcribed under my direction; that the foregoing  
12 transcript is true record of the testimony given.

13 Further, that if the foregoing pertains to the  
14 original transcript of a deposition in a Federal  
15 Case, before completion of the proceedings, review  
16 of the transcript [X] was [ ] was not requested.

17 I further certify I am neither financially  
18 interested in the action nor a relative or employee  
19 of any attorney or any party to this action.

20 IN WITNESS WHEREOF, I have this date  
21 subscribed my name this 23rd day June, 2022.

22  
23 

24 Rebecca L. Romano, RPR, CCR

25 CSR No. 12546

SIMON CROSS

June 23, 2022

RE: FACEBOOK, INC., CONSUMER USER PROFILE LITIGATION

JUNE 20, 2022, SIMON CROSS, JOB NO. 5281223

The above-referenced transcript has been  
completed by Veritext Legal Solutions and  
review of the transcript is being handled as follows:

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Contact Veritext  
to schedule a time to review the original transcript at  
a Veritext office.

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Locked .PDF  
Transcript - The witness should review the transcript and  
make any necessary corrections on the errata pages included  
below, notating the page and line number of the corrections.  
The witness should then sign and date the errata and penalty  
of perjury pages and return the completed pages to all  
appearing counsel within the period of time determined at  
the deposition or provided by the Code of Civil Procedure.

\_\_\_ Waiving the CA Code of Civil Procedure per Stipulation of  
Counsel - Original transcript to be released for signature  
as determined at the deposition.

\_\_\_ Signature Waived - Reading & Signature was waived at the  
time of the deposition.

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1     xx Federal R&S Requested (FRCP 30(e)(1)(B)) - Locked .PDF  
2     Transcript - You should review the transcript and  
3     make any necessary corrections on the errata pages included  
4     below, notating the page and line number of the corrections.  
5     You should then sign and date the errata and penalty  
6     of perjury pages and return the completed pages to all  
7     appearing counsel within the period of time determined at  
8     the deposition or provided by the Federal Rules.  
9     \_\_\_ Federal R&S Not Requested - Reading & Signature was not  
10    requested before the completion of the deposition.

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1 I, SIMON CROSS, do hereby declare under  
2 penalty of perjury that I have read the foregoing  
3 transcript; that I have made any corrections as  
4 appear notes; that my testimony as contained  
5 herein, as corrected, is true and correct.

6 Executed this \_\_\_\_ day of \_\_\_\_\_,  
7 2022, at \_\_\_\_\_, \_\_\_\_\_.

8  
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12 \_\_\_\_\_  
13 SIMON CROSS  
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HIGHLY CONFIDENTIAL

RE: FACEBOOK, INC., CONSUMER USER PROFILE LITIGATION  
SIMON CROSS (JOB NO. 5281223)

E R R A T A S H E E T

PAGE\_\_\_\_\_ LINE\_\_\_\_\_ CHANGE\_\_\_\_\_

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REASON\_\_\_\_\_

SIMON CROSS

Date

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[&amp; - 3:18]

<b>&amp;</b>	<b>19</b> 882:8	944:12	<b>2100</b> 729:17
<b>&amp;</b> 725:14 726:19 728:5 729:5 730:5 733:18 735:10 982:23 983:9	<b>19th</b> 922:10 936:20 938:3,13 <b>1:35</b> 726:18 733:2 733:6	<b>2013</b> 797:14 821:3 821:10 826:8,13 838:20 910:13 944:12,13	<b>213</b> 731:10 <b>214</b> 729:19 <b>23</b> 982:2 <b>23:51.0</b> 957:9 <b>23rd</b> 981:21
<b>0</b>	<b>2</b>	<b>2014</b> 752:16 794:12 826:8,13 831:8 833:20,22 833:24,25 834:19 834:21 835:5,11 836:4,7 842:5,7,13 843:13 844:3 845:10 846:10,19 847:1,2 910:13 914:13,20	<b>24</b> 922:14 936:16 936:19 938:3,12 <b>25</b> 751:17 754:5 <b>253-9706</b> 731:10 <b>2843</b> 725:4 726:4 <b>298-5735</b> 730:11 <b>2:53</b> 785:21 <b>2c</b> 740:10 <b>2cu</b> 744:5 <b>2d</b> 744:20 800:15 800:16 847:5 848:16,20
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<b>1</b>			
<b>1</b> 983:1 <b>10</b> 934:25 <b>100</b> 791:24 929:24 937:5,12 939:8 976:15 <b>12</b> 817:3 936:23 938:1 <b>1201</b> 727:11 <b>12546</b> 725:20 981:25 <b>12:23:51</b> 957:19 957:22 <b>12th</b> 728:9 <b>14</b> 838:20 <b>145330</b> 968:6 <b>15</b> 742:16 770:16 774:20,20 813:23 913:24 <b>1600</b> 728:10 <b>18</b> 725:6 726:6 <b>1801</b> 730:8 <b>1881</b> 730:16			

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**[3rd - acquired]**

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<b>4</b> 725:17 732:3 733:8 867:24 975:14 976:12	<b>725</b> 725:25	805:10 814:5,7	943:7,9 944:20
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<b>4200</b> 730:9	<b>735</b> 732:5	835:24 848:4	954:2,12,15,21,23
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934:25	889:7,8	925:25 932:6	<b>accessed</b> 764:20
<b>427</b> 732:18 945:8	<b>80202-2642</b>	940:5,21,25 942:6	767:4,5 786:12,15
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<b>5281223</b> 725:24	<b>90013</b> 731:9	786:8 787:17	840:20 853:23
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[clear - concerning]

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[exactly - facebook]

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[logging - matt]

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[merge - necessarily]

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## [objects - particular]

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[particular - permission]

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[policy - privilege]

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[privileged - querying]

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## [question - records]

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[retention - schwing]

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<div>zarakhovsky 826:23 zarashaw 826:22 zero 938:11,15,18 979:22 980:6,7 zoom 725:12</div>

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

-----  
This document relates to:  
ALL ACTIONS  
-----

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ZOOM DEPOSITION OF FACEBOOK's 30(b)(6)  
CORPORATE REPRESENTATIVE - SIMON CROSS  
(Reported Remotely via Video & Web Videoconference)  
London, England (Deponent's location)  
Tuesday, June 21, 2022  
Volume 5

STENOGRAPHICALLY REPORTED BY:  
REBECCA L. ROMANO, RPR, CSR, CCR  
California CSR No. 12546  
Nevada CCR No. 827  
Oregon CSR No. 20-0466  
Washington CCR No. 3491  
JOB NO. 5291734  
PAGES 986 - 1222

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

-----  
This document relates to:  
ALL ACTIONS  
-----

DEPOSITION OF SIMON CROSS, taken on  
behalf of the Plaintiffs, with the deponent located  
in London, England, commencing at  
1:37 p.m., Tuesday, June 21, 2022, remotely  
reported via Video & Web videoconference before  
REBECCA L. ROMANO, a Certified Shorthand Reporter,  
Certified Court Reporter, Registered Professional  
Reporter.

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APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

KELLER ROHRBACK L.L.P.

BY: DEREK W. LOESER

BY: CARI CAMPEN LAUFENBERG

BY: ADELE A. DANIEL

BY: EMMA WRIGHT

Attorneys at Law

1201 Third Avenue

Suite 3200

Seattle, Washington 98101

(206) 623-1900

dloeser@kellerrohrback.com

claufenberg@kellerrohrback.com

adaniel@kellerrohrback.com

ewright@kellerrohrback.com

/////

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APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

BLEICHMAR FONTI & AULD LLP

BY: MATTHEW MELAMED

BY: ANNE K. DAVIS

BY: LESLEY E. WEAVER

Attorneys at Law

555 12th Street

Suite 1600

Oakland, California 94607

(415) 445-4003

mmelamed@bfalaw.com

adavis@bfalaw.com

lweaver@bfalaw.com

/////

HIGHLY CONFIDENTIAL

1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)

3

4 For Facebook, Inc.:

5 GIBSON, DUNN & CRUTCHER LLP

6 BY: AUSTIN SCHWING

7 Attorney at Law

8 555 Mission Street

9 Suite 3000

10 San Francisco, California 94105-0921

11 (415) 393-8200

12 aschwing@gibsondunn.com

13 and

14 BY: MATT BUONGIORNO

15 Attorney at Law

16 2001 Ross Avenue

17 Suite 2100

18 Dallas, Texas 75201

19 (214) 698-3204

20 mbuongiorno@gibsondunn.com

21

22

23

24

25 //

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APPEARANCES OF COUNSEL(cont'd)

(All parties appearing via Web videoconference)

For Facebook, Inc.:

GIBSON, DUNN & CRUTCHER LLP

BY: HANNAH REGAN-SMITH

Attorneys at Law

1801 California Street

Suite 4200

Denver, Colorado 80202-2642

(303) 298-5735

hregan-smith@gibsondunn.com

and

BY: PHUNTSO WANGDRA

Attorney at Law

1881 Page Mill Road

Palo Alto, California 94304-1211

(650) 849-5206

pwangdra@gibsondunn.com

/////

HIGHLY CONFIDENTIAL

1 APPEARANCES OF COUNSEL(cont'd)  
2 (All parties appearing via Web videoconference)  
3

4 JAMS

5 BY: DANIEL B. GARRIE

6 Special Master

7 555 W. 5th Street

8 32nd Floor

9 Los Angeles, California 90013

10 (213) 253-9706

11 dgarrie@jamsadr.com  
12  
13  
14

15 ALSO PRESENT:

16 Ian Chen, Associate General Counsel,

17 Meta Platforms

18 John Macdonell, Videographer  
19  
20  
21  
22  
23  
24

25 // // // //

## HIGHLY CONFIDENTIAL

## 1 I N D E X

2 DEPONENT EXAMINATION

3 SIMON CROSS PAGE

4 VOLUME 5

5 BY MR. MELAMED 998

6 BY MR. LOESER 1139

7 BY MR. SCHWING 1206

8 BY MR. LOESER 1207

9

10

## 11 E X H I B I T S

12 NUMBER PAGE

13 DESCRIPTION

14 Exhibit 429 Native Excel Spreadsheet 1007

15 C2\_019\_FB-CA-MDL-02936297;

16

17 Exhibit 430 Message Summary, 1101

18 FB-CA-MDL-02898663 -

19 FB-CA-MDL002898668;

20

21 Exhibit 431 Native Excel Spreadsheet, 1107

22 C2\_113a\_FB-CA-MDL-02898670;

23

24 Exhibit 432 Native Excel Spreadsheet, 1111

25 FB-CA-MDL-02674226;

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## 1 E X H I B I T S (cont'd)

2 NUMBER PAGE

3 DESCRIPTION

4 Exhibit 433 Email String Subject: V1 1116

5 extensions,

6 FB-CA-MDL-01952426 -

7 FB-CA-MDL-01952427;

8

9

## 10 PREVIOUSLY MARKED EXHIBITS

11 NUMBER PAGE

12 Exhibit 339 1171

13

14

15

16

17

18

19

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22

23

24

25 /////



## HIGHLY CONFIDENTIAL

1 London, England; Tuesday, June 21, 2022 09:04:04

2 1:37 p.m.

3 ---o0o---

4

5 THE VIDEOGRAPHER: Okay. We're on the 01:36:58

6 record. It's 1:37 p.m. on June 21st, 2022. This

7 is Volume 5 in Simon Cross's deposition. We're

8 here in the matter of Facebook Consumer Privacy

9 User Profile Litigation.

10 I'm John Macdonell, the videographer with 01:37:15

11 Veritext.

12 Mr. Cross has previously been sworn, but

13 would counsel please identify themselves for the

14 record.

15 MR. MELAMED: Good morning. This is 01:37:26

16 Matt Melamed from Bleichmar Fonti & Auld on behalf

17 of plaintiffs. With me presently is Adele Daniel

18 from Keller Rohrbach, also on behalf of plaintiffs.

19 And -- I'm sorry -- also Anne Davis from

20 Bleichmar Fonti & Auld on behalf of plaintiffs. 01:37:43

21 MR. SCHWING: Good morning. This is

22 Austin Schwing of Gibson, Dunn & Crutcher on behalf

23 of Meta Platforms Inc. I'm joined by Ian Chen,

24 Hannah Regan-Smith, and also Phuntso Wangdra and

25 Matt Buongiorno. 01:38:00

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1 SPECIAL MASTER GARRIE: This is 01:38:07  
2 Special Master Garrie here on behalf of the Court.  
3 MR. MELAMED: Good morning. Before we  
4 start today's testimony, I just want to identify a  
5 few documents or sources of information that 01:38:29  
6 Mr. Cross discussed yesterday that we want to  
7 follow up with Facebook regarding their production.  
8 One is the Can tables, which Mr. Cross, I  
9 believe, identified yesterday, as tables initiated  
10 in or around 2019 operational, in or around 2020, 01:38:53  
11 that identified the calls that -- certain calls  
12 that apps could make on either data.  
13 Another is the Did tables, which were  
14 initiated around the same time. And those indicate  
15 the calls -- the calls that return user 01:39:21  
16 information, where the information was returned, so  
17 those two seem to work in parallel. I apologize if  
18 I'm misstating. I don't intend to. What those  
19 tables were, I think Mr. Cross's testimony on those  
20 was clear yesterday. 01:39:37  
21 The third is Pearly Gates. Which  
22 Mr. Cross identified as a precursor or the  
23 precursor to the capabilities tool.  
24 And the fourth is the Launch Manager,  
25 which was identified as a tool to track privacy -- 01:39:49

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1 a number of privacy decisions that were made 01:39:55  
2 internally at Facebook. Same thing with those two.  
3 I don't mean to misstate what Mr. Cross testified  
4 about those. His testimony is what it was. I'm  
5 just identifying them for the record. 01:40:09

6 Three of those four, the Can tables, the  
7 Did tables and Pearly Gates, I do not believe have  
8 been identified previously. The plaintiffs in the  
9 litigation, the fourth Launch Manager has been  
10 identified previously, and plaintiffs have 01:40:23  
11 requested that previously.

12 And would -- are going to request it  
13 again.

14 But I just wanted to put that on the  
15 record that we will follow up as well. 01:40:34

16 MR. SCHWING: Okay. Well, I appreciate  
17 you raising the issues that you're concerned about,  
18 Matt -- Mr. Melamed, you and I are friendly, so I  
19 apologize for the "Matt."

20 But I know Mr. Cross has previously 01:40:53  
21 identified Pearly Gates in a previous deposition  
22 session, and the same is true of the Did table.  
23 And you already knew about the Launch Manager.  
24 Happy -- happy to talk to you, you know, about  
25 document discovery issues. I don't think this is 01:41:12

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1 the right time. But, you know, we can certainly 01:41:16  
2 discuss that.

3 And I also wanted to -- to note, as I did  
4 before we got on the record, that Mr. Cross had a  
5 few things that he wanted to clarify, some 01:41:26  
6 additional information related to some of the  
7 questioning yesterday.

8 So at a convenient point in the  
9 deposition, whenever you think it's appropriate, he  
10 would like to share that. 01:41:38

11 MR. MELAMED: Thank you.

12

13 SIMON CROSS,  
14 having been previously administered an oath, was  
15 examined and testified as follows: 01:41:41

16 EXAMINATION (resumed)

17 BY MR. MELAMED:

18 Q. So, Mr. Cross, you understand you're  
19 still under oath, correct?

20 A. I do. 01:41:45

21 Q. What --

22 SPECIAL MASTER GARRIE: Are we on the  
23 record?

24 MR. MELAMED: Mr. --

25 Special Master Garrie, sorry. 01:41:49

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1 SPECIAL MASTER GARRIE: Yeah, I am sorry 01:41:51  
2 for interrupting. I was going to say, in the  
3 interest of efficiency, it would be most helpful if  
4 the parties could meet and confirm on the issues  
5 decided and discussed, and add the issue to 01:41:59  
6 mediation tracker so that way we have a record of  
7 these ongoing issues.

8 If there are downstream issues about each  
9 of these different things, I just wanted to notate  
10 that now because I have other issues that I've 01:42:13  
11 written down that haven't been raised on the  
12 mediation tracker, and I'm just assuming they're  
13 being resolved.

14 So if the parties have a process that's  
15 great. I just encourage them to document it so we 01:42:24  
16 don't have any downstream surprises with additional  
17 folks coming -- being required in the interest of  
18 completeness. And if you could just document that  
19 from the plaintiff's side, that would very helpful.

20 MR. MELAMED: Will do. Thank you. 01:42:41

21 Q. (By Mr. Melamed) So, Mr. Cross, your --  
22 Mr. Schwing indicated that you have some additional  
23 testimony or clar- -- testimony or clarifying  
24 testimony regarding some things you talked about  
25 yesterday. 01:42:55

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1                   So now would be a great time to provide                   01:42:55  
2                   that clarification.

3                   A.     Sure.   Yeah.   Yesterday we were talking  
4                   about some of the tables in the capability tool.  
5                   Regarding the capability tool, one of those tables                   01:43:07  
6                   was the -- the Grant table, and I think I mentioned  
7                   that the [REDACTED]  
8                   might refer to [REDACTED]

9                   My understanding is actually they --  
10                  they're not [REDACTED] they're just                   01:43:28  
11                  [REDACTED] to this table.

12                  So, yes, that's one thing I wanted to --  
13                  to clarify.

14                  Q.     Do those [REDACTED] cross-reference any other  
15                  tables? Are they identified in any other tables                   01:43:41  
16                  relevant to the capabilities tool?

17                  A.     My understanding is they -- they're not  
18                  cross-referenced in another table.

19                  Q.     Thank you.

20                  Do you have anything else you'd like to                   01:43:54  
21                  clarify from yesterday's testimony?

22                  A.     Yesterday you asked me some questions  
23                  about -- the rest API and FQL. I can say that  
24                  the -- they were deprecated or the deprecation was  
25                  announced in 2014, I believe in August. In API                   01:44:11

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1 Version 2.1. 01:44:17

2 They remained available to developers for  
3 the duration of the API existed, which was until  
4 October of 2016. After that point, they would only  
5 have been available to -- to apps via a whitelist. 01:44:31

6 And my understanding is that the last  
7 third-party apps were removed from the rest API  
8 whitelist [REDACTED]

9 And -- and also my understanding is  
10 the -- the last third-party app was removed from 01:44:51  
11 the -- so the first one I mentioned was the FQL --  
12 sorry -- FQL, [REDACTED]

13 And then my understanding is that the  
14 last third-party app was removed from the whitelist  
15 that gave access to the rest API in around 01:45:08

16 [REDACTED]

17 Q. Thank you.

18 Is there a list somewhere of the apps  
19 that were permitted to access the rest API after  
20 2016? 01:45:30

21 A. That information is -- is -- as I  
22 understand, it would be available in the -- in the  
23 Grant table, which you have access to.

24 Q. Okay. And is the -- and you're talking  
25 about the capabilities grant -- tool Grant table, 01:45:44

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1 correct? 01:45:47

2 A. That's correct. My understanding is that  
3 access to those two legacy APIs was gated by the  
4 capability tool and, therefore, the apps that would  
5 have had access to query those APIs, would have 01:45:57  
6 been listed in the capability tool.

7 Q. And is the answer the same for FQL, that  
8 the list of apps that were permitted to access user  
9 information by FQL queries is after 20 --  
10 October 2016 is indicated in the capabilities tool 01:46:17  
11 parens table?

12 A. That's my understanding too, yes.

13 Q. Do you have any other clarifications or  
14 follow up you want to offer regarding yesterday's  
15 testimony? 01:46:36

16 A. You asked me when Facebook [REDACTED]  
17 capabilities from apps [REDACTED]  
18 those apps. My understanding is that that process  
19 began in October 2018.

20 Q. So prior to -- is it correct, then, to 01:47:03  
21 say, that prior to October 2018, Facebook was not  
22 [REDACTED] where those apps

23 [REDACTED]

24 MR. SCHWING: Object to form.

25 THE DEPONENT: There was no [REDACTED] 01:47:24



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1 [REDACTED] in place until October 2018 from [REDACTED] [REDACTED]  
2 [REDACTED] that [REDACTED]  
3 [REDACTED] There would have been [REDACTED]  
4 [REDACTED] in place. But that was the  
5 moment, as I understand it, that [REDACTED] 01:47:43  
6 was introduced.

7 Q. (By Mr. Melamed) And I apologize if this  
8 is asking you to testify about something you  
9 already talked about.

10 What was the [REDACTED] that 01:47:55  
11 commenced in October 2018 regarding the [REDACTED]  
12 [REDACTED] from apps that were [REDACTED]  
13 [REDACTED]

14 A. My understanding is -- a [REDACTED]  
15 [REDACTED] that check 01:48:18  
16 a given capability, and if there was no indication  
17 [REDACTED]  
18 [REDACTED] within a time period, then the system  
19 [REDACTED] from the app.

20 Q. What was the time period that -- that 01:48:43  
21 triggered the [REDACTED] you're talking  
22 about?

23 A. My understanding is that the time period  
24 is [REDACTED]

25 Q. Was there any ability to override that 01:48:57

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## HIGHLY CONFIDENTIAL

1 [REDACTED] of a capability that [REDACTED] [REDACTED]  
2 [REDACTED] by an app in the past [REDACTED] after  
3 October 2018?

4 A. My understanding is that where there is  
5 a -- I think the field name is [REDACTED] 01:49:13  
6 I'm -- I'm -- I can't remember the exact field name  
7 here. We -- we looked at it yesterday. But I  
8 think it's auto -- you have -- you have the thing  
9 in front of you -- I don't -- I'm not allowed -- I  
10 don't have notes in front of me on this. 01:49:33

11 So maybe you could refresh my memory of  
12 the column we're discussing here.

13 Q. Yeah. I'm -- I'm -- do you recall which  
14 table it's in? I'm happy to pull that exhibit up.

15 A. The Grant table. 01:49:47

16 Q. Okay. Thank you.

17 Okay. Can you see my screen?

18 A. Yes.

19 Q. So this is -- and I'll zoom in a little  
20 bit. This is Exhibit 428, which is the 01:50:13  
21 capabilities tool Grant table. I can resize these  
22 columns quickly.

23 Do you see -- as I'm doing this --  
24 actually let me stop so you can see them. Before I  
25 resize them, do you see the column that indicates 01:50:28

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1 the [REDACTED] [REDACTED]  
[REDACTED] of a capability -- let me rephrase that.  
3 The [REDACTED] of a capability  
4 [REDACTED] by an app in the past  
5 [REDACTED] 01:50:43  
6 A. That's column J.  
7 Q. Column J. Is [REDACTED]  
8 A. My understanding is the -- if an app  
9 has -- if there was an [REDACTED] listed for  
10 an app, then the capability [REDACTED] from 01:50:57  
11 the app [REDACTED] even if [REDACTED]  
[REDACTED] by the app.  
13 Q. So for instance, in row 5 column J, where  
14 the [REDACTED] for this [REDACTED]  
[REDACTED] 01:51:16  
16 That indicates that the [REDACTED]  
[REDACTED] of that capability from that app is  
18 [REDACTED] at which time the  
19 [REDACTED] from the app?  
20 A. That's my understanding, yes. 01:51:40  
21 Q. And, again, we talked about this  
22 yesterday. But do you -- and so I apologize if  
23 I'm -- I don't mean to make miss- -- restate what  
24 you've already testified about. I'm just trying to  
25 understand these columns and context of one another 01:51:55

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1 in light of the additional testimony you're 01:51:57  
2 offering.

3 Is there any relationship between  
4 column K and the [REDACTED] of the  
5 capability from an app that started in 01:52:10  
6 October 2018?

7 A. My understanding that that column  
8 would -- if -- if that column contained a  
9 [REDACTED] would -- would mean that --  
10 that also the [REDACTED] from 01:52:28  
11 the app, [REDACTED] in a [REDACTED]  
12 period.

13 Q. And in that instance, if there was the  
14 [REDACTED] indicated in this column, would that mean there  
15 is -- unlike column J where the exception provides 01:52:47  
16 an [REDACTED] if there is a  
17 [REDACTED] in column K it would not provide a  
18 [REDACTED], but would the capability app  
19 pairing would [REDACTED] until that was  
20 changed; is that accurate? 01:53:08

21 A. That's my understanding of the system.

22 Q. Do you have any other testimony you'd  
23 like to clarify from yesterday?

24 A. Nope, that covers the -- the things I'd  
25 like to catch up on. 01:53:21

## HIGHLY CONFIDENTIAL

1 Q. So yesterday we talked about two of three 01:53:32  
2 spreadsheets that were produced by Facebook that  
3 reflect the capabilities tool, and I wanted to jump  
4 into the third today.

5 (Exhibit 429 was marked for 01:53:47  
6 identification by the court reporter and is  
7 attached hereto.)

8 MR. MELAMED: So I've marked what -- I  
9 have introduced what's been marked as Exhibit 429.  
10 Exhibit 429 is Bates number FB-CA-MDL-0236297. 01:53:54

11 It has been identified to us as the  
12 "Capability table."

13 I'll share my screen. I've adjusted --  
14 I've only adjusted the columns. And, again, as  
15 with the other spreadsheets we looked at yesterday, 01:54:26  
16 this is merely an excerpt of the Capability table.

17 Are you -- is this something you have  
18 reviewed before today?

19 MR. SCHWING: Mr. Melamed, it's not  
20 showing up in the Exhibit Share. I'm not sure if 01:54:43  
21 that -- we need to do something to get into the  
22 Exhibit Share.

23 MR. MELAMED: I think there is a new day  
24 of -- of -- for the Exhibit Share, and I think that  
25 it says day 5. 01:54:57

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1 MR. SCHWING: Okay. I will figure that 01:55:03  
2 out.  
3 MR. MELAMED: Okay.  
4 MR. SCHWING: Thank you.  
5 Q. (By Mr. Melamed) Mr. Cross, are you able 01:55:05  
6 to see it or at least able to see it on my screen  
7 well enough to be able to testify about it?  
8 A. I can see it yeah, and I -- I also have  
9 it in Exhibit Share.  
10 Q. Okay. 01:55:15  
11 A. By the new date.  
12 MR. MELAMED: Mr. Schwing, would you like  
13 me to wait until you're able to pull it up.  
14 MR. SCHWING: I was able to figure it  
15 out. Thank you. 01:55:24  
16 MR. MELAMED: Okay.  
17 Q. (By Mr. Melamed) So I'd like to do the  
18 same thing we've done with other -- the other  
19 tables that comprise the capabilities tool and talk  
20 through what each of these columns indicates. And, 01:55:35  
21 again, I'm not interested specific -- in the  
22 specific row other than it is indicative of the  
23 values and the type of values that can be entered  
24 and reflected in the table.  
25 So column A is titled [REDACTED] And so if we 01:55:49

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1 look at row 2 here, the ID is [REDACTED] 01:55:55

2 Do you know what that [REDACTED]  
3 references?

4 A. My understanding, that [REDACTED] references

5 the -- the [REDACTED] as stored in 01:56:06  
6 the capability tool.

7 Q. And is there a [REDACTED] associated with  
8 each individual capability?

9 A. My understanding is that the [REDACTED]  
10 for each capability. 01:56:26

11 Q. So capability, to look at row 353 and  
12 skip ahead, do you see that column C is labeled

13 [REDACTED]

14 A. I do see that.

15 Q. And the name reflected in column C is 01:56:43

16 [REDACTED]

17 A. I see that.

18 Q. So first, what is

19 [REDACTED] And I -- to clarify,

20 I don't mean what specific access does that 01:57:01  
21 provide.

22 But what type of information is that?

23 A. That would allow an apps -- an app to  
24 access the videos posted by a user's friends.

25 Q. Okay. And the information in the 01:57:17

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1 [REDACTED] column is [REDACTED] 01:57:19

2 [REDACTED] is that right?

3 A. That's correct. That is the [REDACTED] that

4 the [REDACTED]

5 Q. And is it universal that Facebook's 01:57:39

6 [REDACTED] have underscores where

7 two words are connected?

8 A. Capabilities typically use underscores

9 instead of spaces. But there may be some

10 capabilities where you will use a space in English 01:58:03

11 that the person that created the capability chose

12 not to do so.

13 Q. So going back to the information in

14 column A, these are -- in connection with the

15 information in column C, am I -- do I understand 01:58:25

16 this correctly to say that the capability with

17 [REDACTED]

18 A. That's my understanding, yes.

19 Q. Going back to column B. It says [REDACTED]

20 And it is a [REDACTED] in row 2. 01:58:47

21 What -- do you understand what the

22 information reflected in column B is?

23 A. My understanding is that that refers to

24 an [REDACTED] in Facebook's

25 [REDACTED] 01:59:14

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1 Q. Do you understand the reason why there is 01:59:15  
2 a [REDACTED] as reflected in column A and  
3 Facebook -- [REDACTED] as reflected in column B?

4 A. The capabilities tool uses a [REDACTED]  
5 [REDACTED]  
6 [REDACTED] as it's relatively common at  
7 Facebook that -- would be able to have a way of  
8 [REDACTED] for -- for something from one  
9 database to another.

10 Q. What database does the capabilities tool 01:59:57  
11 use?

12 A. My understanding is that the capability  
13 tool uses the database, a "[REDACTED].

14 Q. Is the [REDACTED] that is reflected in column B  
15 uniquely and permanently associated with a single 02:00:22  
16 capability. In other words, let me -- let me  
17 rephrase that. That was poor phrasing.

18 Is the entry in row 2 column B associated  
19 with the -- with [REDACTED] and capability  
20 name [REDACTED] 02:00:45

21 A. My understanding is that [REDACTED] would  
22 uniquely represent that capability in Facebook's

23 [REDACTED]

24 Q. And every time that [REDACTED] is used  
25 in the [REDACTED], it is referencing 02:01:08

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1 that specific capability; is that correct? 02:01:12

2 A. That's my understanding of what the [REDACTED]  
3 represents in this context.

4 Q. Going onto column D, which is, header is

5 [REDACTED] 02:01:27

6 Do you know the -- what type of  
7 information is reflected in column D?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: The information in  
10 column D would represent [REDACTED] that represents a 02:01:49

11 [REDACTED]  
12 Q. (By Mr. Melamed) "[REDACTED] mean -- meaning

13 [REDACTED]  
14 A. My understanding is [REDACTED] in this context

15 is a [REDACTED] 02:02:14

16 Q. What type of information would be in  
17 [REDACTED] that pertains  
18 to a capability as reflected in a row in this  
19 table?

20 A. My understanding is that for some 02:02:38  
21 capabilities there is a need to have [REDACTED]

22 [REDACTED] which is [REDACTED]

23 [REDACTED] And if that is the case, then that  
24 description would be stored in the [REDACTED] system and

25 the [REDACTED] containing that description 02:03:02

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1 would be referenced here. 02:03:07

2 Q. If there is an entry in column D for a  
3 particular capability that references Facebook's  
4 [REDACTED] -- and -- I'm sorry -- an  
5 entry in [REDACTED] is 02:03:24  
6 it accurate that -- let me withdraw that and  
7 restate it.

8 Where there is a page within Facebook's  
9 [REDACTED] associated with a  
10 capability, as reflected in this table, does that 02:03:45  
11 mean necessarily that the page -- within Facebook's  
12 [REDACTED] was communicated to a  
13 third party?

14 MR. SCHWING: Object to form.

15 THE DEPONENT: I -- I don't think it -- 02:04:02  
16 that's necessarily the case, no.

17 Q. (By Mr. Melamed) So you -- your  
18 testimony is that sometimes that was the purpose of  
19 a page within the [REDACTED] associated with the  
20 capability; is that right? 02:04:17

21 MR. SCHWING: Object to form.

22 THE DEPONENT: My understanding is that  
23 for some capabilities there may be a [REDACTED]  
24 [REDACTED], and that [REDACTED] may contain  
25 [REDACTED]. I can't say for 02:04:33

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1 certain whether or not that means the [REDACTED] [REDACTED]  
[REDACTED] [REDACTED].

3 Q. (By Mr. Melamed) Can you think of other  
4 purposes that Facebook would have a [REDACTED]  
[REDACTED] associated with an individual 02:04:50  
6 capability?

7 A. I'd be speculating as to -- as to why  
8 Facebook might have a [REDACTED]  
9 I wasn't personally closely involved in the  
10 addition of this information. 02:05:11

11 Q. If there was a [REDACTED] identified or  
12 reflected in column D, would Facebook have the  
13 ability to [REDACTED]  
[REDACTED]

15 A. I can't confirm whether or not that would 02:05:39  
16 be possible or not, and for -- for a number of  
17 reasons, technical reasons as to how systems work.  
18 I -- I wouldn't want to confirm that.

19 Q. Do you use Facebook's content management  
20 system? 02:05:59

21 A. I don't on a daily basis use Facebook's  
22 content management system.

23 Q. So if plaintiffs were to identify entries  
24 in column D to Facebook and want to know whether  
25 the [REDACTED] could be 02:06:20

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1 produced, who would you ask at Facebook to 02:06:29  
2 determine whether they could be?

3 A. Who would I ask? I'd -- I would ask our  
4 legal team first of all, if it -- if it's relying  
5 on -- if you're asking questions about whether or 02:06:49  
6 not something can be produced. I assume they would  
7 be able to speak to the -- the engineers or data  
8 scientists who would be able to advise on that  
9 matter.

10 Q. If you were using a capabilities tool 02:07:09  
11 internally and wanted to review the [REDACTED]  
12 reflected in column D, how would you go about  
13 reviewing that [REDACTED] What steps would you  
14 take?

15 MR. SCHWING: Object to form. 02:07:25

16 THE DEPONENT: If the [REDACTED] was visible  
17 in the capability tool, my first attempt would be  
18 to access the [REDACTED] and attempt to s [REDACTED]

20 Q. (By Mr. Melamed) We've gone back and 02:08:01  
21 forth about this tool for a long time, and  
22 sometimes I think both of us have referred to it in  
23 the plural and sometimes in the singular, the  
24 capabilities tool and the capability tool.

25 Is one of those correct? 02:08:12

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1 A. My understanding is those terms are -- 02:08:21  
2 are used interchangeably.

3 Q. Moving onto column E the header is

4

5 What does that mean? 02:08:35

6 A. So inside Facebook code is generally

7

8 called [REDACTED] And so [REDACTED] represents a [REDACTED]

9 [REDACTED] and my understanding is that this

10 would be the [REDACTED] 02:09:02

11 [REDACTED] for this capability.

12 Q. Do you know approximately how many [REDACTED]

13 [REDACTED] that could be -- [REDACTED]

14 [REDACTED] in the

15 capability used tool? 02:09:28

16 MR. SCHWING: Object to form.

17 THE DEPONENT: There's [REDACTED]

18

19 [REDACTED] at -- at Facebook. I -- I don't know how

20 many of them are represented in the capability 02:09:43

21 tool.

22 Q. (By Mr. Melamed) So this cell that I

23 currently highlighted, which is row 2 column E, and

24 it's a [REDACTED] that identifies an

25 [REDACTED] 02:10:01

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1 A. My understanding is that identifies an 02:10:05

2 [REDACTED].

3 Q. What is an [REDACTED]?"?

4 A. An [REDACTED] represents

5 a [REDACTED] for that 02:10:25

6 [REDACTED] And -- and one of them would be [REDACTED] at  
7 any given time.

8 Q. So that number represents a [REDACTED]

9 [REDACTED] one of whom is always available to -- to do  
10 what? 02:10:49

11 A. [REDACTED]  
12 perform a number of activities and you said that  
13 someone is always available. I -- I can't confirm  
14 whether or not for every [REDACTED] there is [REDACTED]

15 [REDACTED] 02:11:15

16 Q. It's similar to an [REDACTED] that  
17 there's somebody available from this team to  
18 [REDACTED] with this capability?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: My understanding of the 02:11:34  
21 purpose of this is that this identifies a -- a

22 [REDACTED] who would be the [REDACTED]

23 [REDACTED] in understanding the -- [REDACTED]  
24 with the capability and how to resolve it.

25 Q. (By Mr. Melamed) Column F has the header 02:11:56

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1 [REDACTED] and in row 2 it's a [REDACTED] [REDACTED]  
2 [REDACTED]  
3 Do you know what the [REDACTED]  
4 indicates in the Capability table?  
5 A. My understanding is that this represents 02:12:20  
6 a -- [REDACTED] and what it is  
7 [REDACTED] and in some cases [REDACTED]  
8 [REDACTED]  
9 Q. Do you know who is responsible for  
10 entering the [REDACTED] for a particular 02:12:38  
11 capability?  
12 A. Typically the engineer who creates the  
13 capability is first responsible for [REDACTED]  
14 [REDACTED] for the capability.  
15 Q. Do you know if the identity of the 02:13:00  
16 engineer who creates each capability in the  
17 Capability table is reflected in the Capability  
18 table?  
19 A. My understanding is that the [REDACTED]  
20 [REDACTED] represents the -- the -- [REDACTED] of 02:13:17  
21 the [REDACTED]  
22 Q. All right.  
23 So skipping ahead here, a few columns  
24 that the [REDACTED] is column J, correct?  
25 A. That's correct. 02:13:33

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## HIGHLY CONFIDENTIAL

1 Q. So the person [REDACTED] capability 02:13:33  
2 in row 2 is the person who -- with the Facebook  
3 [REDACTED] is that right?

4 A. That's my understanding. And that  
5 references the [REDACTED] the 02:13:50  
6 capability in the tool. It's possible that the  
7 [REDACTED] may  
8 be a different person.

9 Q. And is it your understanding, that the  
10 [REDACTED] into the tool is 02:14:06  
11 the [REDACTED] in  
12 column F?

13 A. It's likely that the person that [REDACTED]  
14 [REDACTED] in the tool [REDACTED]  
15 [REDACTED]. But the [REDACTED] 02:14:24  
16 likely changed over time as [REDACTED] in the  
17 tool.

18 Q. Are those -- are the identity -- let me  
19 withdraw that.

20 Is the identity of any individual who 02:14:40  
21 [REDACTED] captured in the tool?

22 A. My understanding is that [REDACTED]  
23 [REDACTED] is one of the entries captured in the  
24 Log table.

25 Q. So to determine whether the [REDACTED] 02:15:01

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1 [REDACTED] when you would cross reference 02:15:04  
2 the information in Exhibit 429 with the Log table,  
3 which is one of the exhibits we looked at  
4 yesterday; is that right?

5 A. My understanding is that the Log table 02:15:19  
6 would indicate when a [REDACTED]  
7 [REDACTED] for a specific  
8 capability.

9 Q. Column G the header is  
10 [REDACTED] 02:15:33

11 What information is reflected in that  
12 column? What does [REDACTED] -- let me withdraw that  
13 and state it again.

14 What does [REDACTED]

15 A. At a high level, an [REDACTED] is 02:15:49

16 [REDACTED]

17 And by [REDACTED] I understand that to mean that  
18 the -- the capability [REDACTED]

19 [REDACTED]

20 Q. And if you look at row 2 in column G 02:16:14  
21 under "[REDACTED]"

22 Do you know why -- what it means if an  
23 [REDACTED] in row G -- I'm sorry, column G?

24 A. Could mean a number of things. I'm not  
25 entirely sure how that column is -- is populated 02:16:41

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1 and how it would be filled. 02:16:45

2 Q. Who would you ask if you wanted to know  
3 more about how column G [REDACTED] is

4 [REDACTED]

5 A. I would speak to Mr. Molaro in the first 02:17:08  
6 instance.

7 Q. Column H has a header

8 [REDACTED]

9 Do you know what that means?

10 A. My understanding is that that refers to 02:17:26  
11 what would be a [REDACTED] of the

12 [REDACTED] to be -- [REDACTED]

13 [REDACTED] to it. Although my

14 understanding is that information is not

15 universally captured in this tool. 02:17:47

16 Q. When that information is captured in this  
17 tool, do you know who is responsible for entering  
18 it?

19 A. I'm not sure who's responsible for -- for  
20 entering it. 02:18:05

21 Q. Do you know why this [REDACTED]  
22 information is not always entered in the Capability  
23 table?

24 A. Sorry, can you ask the question again.

25 Q. Sure. 02:18:30

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## HIGHLY CONFIDENTIAL

1                   So you said -- my understanding is you                   02:18:32  
2                   said that information about the [REDACTED]  
3                   is not always reflected in the capability tool; is  
4                   that right?

5                   A.    The fact that this entry is [REDACTED] suggests                   02:18:43  
6                   that [REDACTED] for this capability is -- is  
7                   not captured here.

8                   Q.    Do you know why [REDACTED] is not  
9                   always captured in the capability tool?

10                  A.    I don't know why the [REDACTED]                   02:19:00  
11                  is -- is always not -- is not always captured in  
12                  this tool, there's -- there's likely a bunch of  
13                  reasons why.

14                  Q.    Column I is [REDACTED]

15                               What does that mean?                   02:19:21

16                  A.    My understanding is that that refers to  
17                  an assessment of whether or not the capability  
18                  [REDACTED] as [REDACTED]  
19                  as [REDACTED] that's my  
20                  understanding.                                       02:19:45

21                  Q.    Do you know which [REDACTED] you're --  
22                  you're referencing?

23                  A.    I don't know which [REDACTED] that refers  
24                  to.

25                  Q.    Do you know who makes the determination                   02:19:56

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1 whether or not the [REDACTED] [REDACTED]  
[REDACTED]  
3 A. My understanding is that's done by a  
4 group of people that's part of the [REDACTED]  
5 Q. Do you know when the [REDACTED] 02:20:18  
6 started?  
7 A. My understanding is the [REDACTED]  
8 began in February 2019.  
9 Q. Do you know the members of -- let me  
10 withdraw that and restate. 02:20:37  
11 Do you know who is part of the [REDACTED]  
[REDACTED] at Facebook?  
13 A. I don't know the names of the people  
14 directly involved in the [REDACTED]  
15 Q. Do you know the names of any of the 02:20:48  
16 people involved in the [REDACTED]  
17 A. As I sit here today I'm -- I'm not sure  
18 of the names of the people involved in the [REDACTED]  
[REDACTED]  
20 Q. And I don't mean to keep making you go 02:21:01  
21 back over the same question. I'm just going to ask  
22 it slightly -- slightly differently.  
23 Do you know anyone who has ever been  
24 involved in the [REDACTED]?  
25 A. I know that the [REDACTED] -- no, 02:21:21

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1 I'm -- I'm not aware as I sit here today of -- of 02:21:24  
2 specific names of people who I can confirm were  
3 involved in the [REDACTED]. It's likely that  
4 people were involved in different ways. But I -- I  
5 wouldn't want to give information I'm not confident 02:21:35  
6 about.

7 Q. Do you know if there's a particular team  
8 within the [REDACTED] who is responsible for  
9 determining whether the capability [REDACTED]  
10 as that term is used in column I? 02:21:51

11 A. My understanding is that the, there --  
12 there is a process as part of the [REDACTED], that  
13 determines whether or not a capability [REDACTED]  
14 [REDACTED]

15 Q. Do you know anything about that process? 02:22:07

16 MR. SCHWING: Object to form.

17 THE DEPONENT: My understanding is that  
18 that [REDACTED] that  
19 would be [REDACTED] of this capability  
20 being applied and -- and assess whether or not that 02:22:29  
21 [REDACTED]  
22 [REDACTED]

23 Q. (By Mr. Melamed) Do you know if there's  
24 any documentation of -- of the process evolves when  
25 the [REDACTED] determines whether a given 02:22:47

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1 capability [REDACTED] 02:22:57

2 A. I imagine that some documentation exists  
3 about the [REDACTED], but I do  
4 not -- would not know the specifics, I'm afraid.

5 Q. If you wanted to know more about the 02:23:19  
6 [REDACTED] as it pertains to column I in the  
7 capability tool, who would you ask?

8 A. I would ask Mr. Molaro in the first  
9 instance.

10 Q. Column J has the header [REDACTED] " and 02:23:37  
11 we talked about that. That is the person who  
12 [REDACTED] into the capability tool,  
13 correct?

14 A. No, not necessarily. My understanding is  
15 the [REDACTED] the 02:23:55  
16 capability in the capability tool.

17 Q. Thanks for clarification.

18 Can you just describe what you mean by  
19 [REDACTED] the capability in the  
20 capability tool"? 02:24:14

21 A. My understanding is that there's a way  
22 for a Facebook employee to go to the capability  
23 tool and -- and [REDACTED] capability in the  
24 tool.

25 Q. And when a Facebook employee goes to the 02:24:32

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1 capability tool and [REDACTED] tool 02:24:34  
2 that [REDACTED] is recorded in column J  
3 for -- for the capability that that person [REDACTED]  
4 [REDACTED] about?

5 A. My understanding is that column J 02:24:47  
6 represents the -- [REDACTED]  
7 [REDACTED] in the capabilities  
8 tool.

9 Q. Okay. And column K is -- has the header  
10 [REDACTED] 02:25:01

11 Can you explain what that means?

12 A. My understanding is that [REDACTED]  
13 refers to whether or not the capability [REDACTED]  
14 [REDACTED] If the capability [REDACTED]  
15 then it's [REDACTED] [REDACTED]  
16 [REDACTED] in any way.

17 Q. Just a couple follow-up questions on  
18 that. First, what -- if you look at row 2,  
19 column K, the entry is [REDACTED] in the [REDACTED]  
20 [REDACTED] column. 02:25:51

21 Do you know what [REDACTED] " means in this  
22 context?

23 A. [REDACTED] would mean that the capability  
24 [REDACTED] in the capability tool.

25 Q. What does it mean for a capability [REDACTED] 02:26:05

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## HIGHLY CONFIDENTIAL

1 [REDACTED] in the capability tool? 02:26:09

2 A. My understanding is that if a capability

3 [REDACTED] in the capability tool, then no

4 checks -- that that capability [REDACTED]

5 [REDACTED] on Facebook developer platform. 02:26:29

6 Q. Is the use of the term -- let me withdraw

7 that.

8 Does it mean something different here in

9 column K to note that a capability [REDACTED]

10 than it does, for instance, when Facebook 02:26:49

11 [REDACTED]

12 [REDACTED]

13 MR. SCHWING: Object to form.

14 THE DEPONENT: This field refers

15 specifically to the -- the behavior of the 02:27:13

16 capability in the capability tool and how that

17 capability is applied to apps.

18 Q. (By Mr. Melamed) Let me try and restate

19 my question. I'm not trying to ask something

20 tricky. 02:27:30

21 In other contexts, I think we've

22 discussed Facebook has [REDACTED]

23 [REDACTED] that apps are immediate -- that [REDACTED]

24 [REDACTED]

25 Do you understand what I'm saying? And I 02:27:55

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1 don't know that I'm making -- I'm stating this very 02:27:57  
2 clearly. But do you have a general  
3 understanding -- an understanding of what I'm  
4 getting at?

5 MR. SCHWING: Object to form. 02:28:05

6 THE DEPONENT: In this context and in  
7 this tool [REDACTED] refers to whether or not  
8 any app, that this capability [REDACTED]

9 [REDACTED]

10 [REDACTED]

02:28:28

11 So "[REDACTED] in this context means  
12 something very specific and concrete.

13 Q. (By Mr. Melamed) And is the meaning of

14 [REDACTED] in this tool different than the

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 MR. SCHWING: Object to form.

18 THE DEPONENT: First, [REDACTED] is used

19 in -- in a number of different ways in a number of

20 different contexts. In this context it -- it means 02:29:01

21 something very specific. Which means that if a

22 capability is marked as [REDACTED] in the

23 capability tool then this capability [REDACTED]

24 [REDACTED]

25 Q. (By Mr. Melamed) In -- and just to be 02:29:15

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1 more concrete. 02:29:17

2 Are you aware that in 2014 Facebook  
3 announced it would deprecate friends permissions  
4 APIs?

5 A. I'm aware that Facebook said it was going 02:29:33  
6 to make friend permissions unavailable to most of  
7 third-party developers.

8 Q. Okay. Did you hear the word -- did you  
9 understand that Facebook used the term  
10 "deprecation" when it -- or deprecate when it made 02:29:48  
11 that announcement?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: I'm aware of the term  
14 "deprecated" being used in -- in that context.

15 Q. (By Mr. Melamed) Okay. And that the 02:29:59  
16 announcement was that friends permissions would be  
17 deprecated for apps then using Graph 1.0 by  
18 April 30th, 2015.

19 Do you understand that?

20 MR. SCHWING: Object to form. 02:30:22

21 THE DEPONENT: There's a number of  
22 different ways that the changes that were announced  
23 were -- were explained to developers. And, again,  
24 deprecated -- the word "deprecated" can be used  
25 in -- can mean different things in different 02:30:36

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1 contexts. Again, in this context it means 02:30:39  
2 something very specific.

3 Q. (By Mr. Melamed) So in the context of  
4 this tool, if [REDACTED] -- let me withdraw  
5 that and ask a different question. 02:30:51

6 Row 2 says -- it indicates [REDACTED] for [REDACTED]

7 [REDACTED]  
8 Do you know what would be entered if any  
9 capability had, in fact, been [REDACTED] in this  
10 tool? 02:31:05

11 A. My understanding is that if the  
12 capability is considered [REDACTED] in the  
13 capability tool, then the "[REDACTED] column

14 [REDACTED]  
15 Q. If the "[REDACTED] column indicated 02:31:18  
16 [REDACTED] is it accurate to say that that capability

17 [REDACTED]  
18 A. Yes, that's -- that's my understanding.  
19 And as I -- I think I represented earlier, my  
20 understanding is that in this context the 02:31:40

21 capability tool if -- a capability is marked as  
22 [REDACTED] in the capability tool, then the  
23 capability [REDACTED]

24 Q. Do you know whether there are any entries  
25 that are possible for column K other than [REDACTED] and 02:31:56

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1 [REDACTED] 02:32:00

2 A. My understanding is that that column is

3 a -- is a [REDACTED]

4 Q. A [REDACTED]

5 [REDACTED] 02:32:11

6 A. My understanding is that [REDACTED]

7 [REDACTED] It's -- it's possible that there were [REDACTED]

8 [REDACTED] But my understanding is it's

9 probably [REDACTED]

10 Q. You do not know as you sit here today 02:32:26

11 whether there are any [REDACTED] values for column K in

12 the capability tool; is that right?

13 A. I didn't -- in preparation for today's

14 testimony, I didn't review every row of that -- of

15 that table of that column. And my understanding is 02:32:40

16 that it -- it would most -- most likely be [REDACTED]

17 [REDACTED] But I can't confirm that there were [REDACTED]

18 [REDACTED] it's possible.

19 Q. Can you think of a scenario -- let me

20 withdraw that. 02:33:03

21 Can you think of a reason there may be a

22 [REDACTED] in this column, or is this just

23 something where you're trying to create the

24 possibility of -- just explain the possibility that

25 you don't know everything about this tool? 02:33:14

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to form. 02:33:17

2 THE DEPONENT: I -- I -- I reviewed as  
3 much as I can in preparation for this, and my  
4 understanding is that -- is deprecated is a Boolean  
5 value. As I say most rows would have a [REDACTED]  
6 [REDACTED] Just -- referring to the fact that -- that  
7 I haven't reviewed every single row and therefore,  
8 again, it's possible. My -- my understanding is  
9 it's -- it's likely that that column is a true or a  
10 false. 02:33:51

11 Q. (By Mr. Melamed) Thanks for the  
12 clarification.

13 I'm going to scroll over a few columns so  
14 we can see more of the context. So column L is

15 [REDACTED] 02:34:03

16 What does that mean?

17 A. [REDACTED] refers to a -- a [REDACTED]  
18 [REDACTED] that had the  
19 [REDACTED] it  
20 was granted to. 02:34:31

21 Q. So --

22 A. I'm sorry. Go.

23 Q. No. Please, please, I didn't mean to cut  
24 you off.

25 A. Well, that's what [REDACTED] means. 02:34:49

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HIGHLY CONFIDENTIAL

1 Q. So column L indicates [REDACTED] [REDACTED]  
[REDACTED] in  
3 that row?

4 A. So it's a little bit complicated here.

5 The -- my understanding is the [REDACTED] refers 02:35:19

6 to an [REDACTED] in the capabilities tool. But

7 with the advent of the [REDACTED], my

8 understanding is the [REDACTED] have to be

9 approved by the [REDACTED]. And if this is

10 valid, a tool it's only relevant to first-party 02:35:43

11 apps. And, you know, one of the things we're going

12 to get to as we work through this table is that,

13 these columns -- some of these columns refer to how

14 the capability tool operated in -- in the past.

15 Which is different to how it operates 02:36:03

16 today after the advent of the [REDACTED]

17 Q. Is the information in column L -- let me  
18 withdraw that.

19 If there is an entry in column L, does it

20 pertain only to first-party apps? 02:36:16

21 A. My understanding is today the [REDACTED]  
22 functionality only applies to first-party apps.

23 Q. Was there a time in the past when the

24 [REDACTED] functionality applied beyond

25 first-party apps? 02:36:40

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HIGHLY CONFIDENTIAL

1 A. My understanding is that in the -- in the 02:36:47  
2 past, sometime before the advent of the [REDACTED]  
3 [REDACTED] that the -- the [REDACTED] was --  
4 represented [REDACTED]

5 [REDACTED] 02:37:03

6 Q. Do you know when -- what -- let me  
7 withdraw that.

8 At what point in time could the [REDACTED]  
9 [REDACTED] entries pertain to apps beyond first-party  
10 apps? 02:37:37

11 A. I know that -- that was the case in --  
12 from the gestation of the capabilities tool, but  
13 I -- I don't know when the approval system changed.

14 Q. Do you know if the Capability table that  
15 we're looking at presently indicates when a 02:38:06  
16 capability first became available?

17 A. Can you help me understand what you mean  
18 by "first became available."

19 Q. Yes.

20 When -- do you know whether the 02:38:21  
21 Capability table indicates for each capa- -- for  
22 each row, when that capability could first be used  
23 by an app?

24 A. [REDACTED] information  
25 is -- is contained in this -- in this table for 02:38:37

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HIGHLY CONFIDENTIAL

1 capability to be first used by an app. [REDACTED] [REDACTED]  
[REDACTED] [REDACTED], which I understand is captured  
3 by this table, but there would be other things that  
4 would determine whether or not an app could use the  
5 capability, for example, whether or not the code 02:39:00  
6 gating that capability was on the production  
7 servers.

8 Q. Do you know whether that information is  
9 captured in the capabilities tool, if not in this  
10 table somewhere else in the capabilities tool? 02:39:17

11 A. My understanding is that -- [REDACTED]  
[REDACTED]  
[REDACTED] in the -- in the capability tool.

14 Q. Do you know if that level of detail is  
15 captured elsewhere at Facebook? 02:39:31

16 A. I'm -- I'm not an expert in Facebook's  
17 engineering -- engineering systems. And so I'm --  
18 I'm not able to give an -- an answer as to exactly  
19 how that would be achieved.

20 Q. If you wanted to find that level of 02:39:51  
21 detail out, who would you ask?

22 MR. SCHWING: Object to form.

23 THE DEPONENT: I would speak to an  
24 engineer on the -- on the platform team.

25 Q. (By Mr. Melamed) Is there anybody you 02:40:06

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## HIGHLY CONFIDENTIAL

1 would presently go to who is an engineer on the 02:40:09  
2 platform team if you wanted to find that  
3 information out?

4 A. I would go to Mr. -- Mr. Elia in the  
5 first instance. 02:40:23

6 Q. Column M has the header

7 [REDACTED]  
8 What does that mean?

9 A. My understanding is that -- that means  
10 whether or not somebody, either one of the people 02:40:40  
11 in the [REDACTED] is  
12 required before the capability [REDACTED]  
13 application.

14 Q. And what does the entry "[REDACTED]" as  
15 reflected in row 2 column M indicate? 02:41:04

16 A. My understanding is that that would mean  
17 that [REDACTED] to  
18 an app, it [REDACTED]

19 [REDACTED]  
20 Q. And what other values -- are you aware of 02:41:26  
21 the other values that could be entered in column M?

22 A. My understanding is that that's either a

23 [REDACTED]

24 Q. And so if [REDACTED] entered, it would

25 mean that that capability [REDACTED] 02:41:43

HIGHLY CONFIDENTIAL

1 [REDACTED] before the 02:41:48  
2 capability [REDACTED] to an application; is  
3 that right?

4 A. I'm not entirely sure of the specific  
5 behavior that the tool would have exhibited in the 02:42:08  
6 case that that field is [REDACTED]

7 Q. So let me ask that a slightly different  
8 way.

9 If [REDACTED] is indicated in column M, do you  
10 know what that means? 02:42:25

11 A. I'm not entirely confident in -- in  
12 exactly what would remain if there was a [REDACTED] in  
13 column M.

14 Q. Do you have any understanding of what it  
15 would mean if there was a [REDACTED] in column M? 02:42:37

16 A. Not -- not beyond interpretation and  
17 speculation. I -- yeah, I'm not entirely sure of  
18 the precise behavior of the tool and -- and the  
19 systems in the case that that is [REDACTED]

20 Q. Column N, notes 02:42:56

21 [REDACTED]  
22 And what does that mean?

23 A. My understanding is that that refers to  
24 whether or not first-party apps [REDACTED] to  
25 be [REDACTED] 02:43:14

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HIGHLY CONFIDENTIAL

1 Q. The column N contains [REDACTED] 02:43:18

2 [REDACTED]

3 A. My understanding is that that refers to

4 apps which are [REDACTED] as per

5 Facebook's definition. 02:43:36

6 Q. What is Facebook's definition of a

7 [REDACTED]

8 A. At a high level [REDACTED]

9 [REDACTED]

10 That's my high-level understanding. It's -- it's 02:43:51

11 likely that there is a more precise definition, but

12 I -- I can't relay that detail to you today.

13 At a high level [REDACTED]

14 [REDACTED], is my understanding.

15 Q. Column O has the header 02:44:14

16 [REDACTED]

17 What does that mean?

18 A. My understanding is that this refers to

19 whether or not a capability is [REDACTED]

20 [REDACTED] 02:44:34

21 Q. And "[REDACTED] in row 2 indicates that the

22 capability in row 2 is [REDACTED]

23 [REDACTED] is that correct?

24 A. My understanding is that's -- that's what

25 this -- this column means. Although, it's possible 02:44:57

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HIGHLY CONFIDENTIAL

1 that this -- that the way APIs are managed -- 02:45:03  
2 capabilities are managed today, means that the  
3 decisions about which apps the API can -- the  
4 capability can be [REDACTED]

5 [REDACTED] 02:45:20

6 Q. And if they are handled by [REDACTED] does  
7 that mean information may not be entered in  
8 column O?

9 A. I'm not entirely sure, I'm afraid,  
10 whether or not what -- what that means. I -- I 02:45:39  
11 can't be confident in -- what's in column O.

12 Q. Column P is [REDACTED]  
13 Do you know what that means?

14 A. My understanding is that -- this refers  
15 to [REDACTED] And 02:46:04  
16 [REDACTED] would mean that this capability is [REDACTED]

17 [REDACTED]  
18 Q. What would [REDACTED] indicate?

19 A. My understanding is that would mean the  
20 capability is responsible to [REDACTED] [REDACTED]

21 [REDACTED]

22 Q. And what are [REDACTED]

23 A. [REDACTED] are apps which -- or  
24 well, I'm not entirely sure of their precise  
25 definitions. I wouldn't want to -- wouldn't want 02:46:46

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HIGHLY CONFIDENTIAL

1 to speculate. 02:46:48

2 Q. What's your understanding of what

3 [REDACTED] means?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: Again, like I'm -- I'm 02:47:02

6 not -- not confident in this understanding that

7 that's important. But my high-level understanding

8 is it refers to [REDACTED]

9 apps, and are not [REDACTED]

10 [REDACTED] 02:47:20

11 Q. (By Mr. Melamed) Can you give an example

12 of an app that is [REDACTED] nor

13 [REDACTED]

14 A. Again, as I want to caveat my -- my

15 testimony here, one example I think of as a 02:47:37

16 second -- is [REDACTED]

17 Q. Why is it that you understand [REDACTED]

18 [REDACTED]

19 A. I -- I don't understand the details of

20 how [REDACTED] and what goes 02:48:02

21 into that determination, so I don't think it would

22 be appropriate for me to speculate beyond whatever

23 we said.

24 Q. Look in -- let me withdraw that and

25 restate it. 02:48:18

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## HIGHLY CONFIDENTIAL

1 Who should we ask to determine whether -- 02:48:21  
2 what is meant by [REDACTED]  
3 MR. SCHWING: Object to form.  
4 Q. (By Mr. Melamed) Let me restate that.  
5 Who would you ask if you wanted a 02:48:34  
6 definition of what constitutes a [REDACTED]  
7 A. The -- I would speak to Mr. Molaro in the  
8 first instance.  
9 Q. And your understanding of column P is  
10 that there are three possible entries; is that 02:49:00  
11 accurate?  
12 A. My understanding is that there were  
13 three -- three possible entries. It's -- so it's  
14 my previous testimony it's possible that there are  
15 null values here as a -- as a fourth type, but 02:49:17  
16 broadly, [REDACTED] is -- is my  
17 understanding of what this means.  
18 Q. You -- you talked about [REDACTED]  
19 already. For [REDACTED] is it your understanding that  
20 that would mean that [REDACTED] [REDACTED]  
21 [REDACTED] could access  
22 this capability?  
23 A. My understanding is that if this column  
24 contained value [REDACTED] then the capability could  
25 theoretically be granted -- [REDACTED] 02:49:47

HIGHLY CONFIDENTIAL

1 [REDACTED] 02:49:51

2 It's important to know that this tool is  
3 not just used to managing [REDACTED].

4 A lot of Facebook's internal apps and apps that  
5 Facebook builds and makes available are also 02:50:06  
6 managed by this tool.

7 Q. Are all apps on Facebook either [REDACTED]

8 [REDACTED]

9 A. My understanding is that the -- the  
10 definition of -- of [REDACTED] 02:50:37  
11 would allow any app to be categorized as first,

12 [REDACTED]

13 Q. For example, there is no fourth -- no  
14 such thing as a fourth-party app on Facebook.

15 A. I'm not aware of -- of the concept of a 02:50:51  
16 fourth-party app.

17 Q. Column Q, it says "a [REDACTED]"

18 What does that mean?

19 A. My understanding that -- is that that  
20 means whether or not the -- the capability has been 02:51:10

21 [REDACTED] Although, it's  
22 also my understanding that a [REDACTED] value there  
23 doesn't mean it hasn't [REDACTED]

24 [REDACTED]

25 Q. What is your understanding of what a 02:51:30

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HIGHLY CONFIDENTIAL

1 [REDACTED] value in column Q indicates? 02:51:34

2 A. I'm not sure precisely what -- what [REDACTED]  
3 means in this context.

4 Q. What other values could be entered in --  
5 in column Q? 02:51:48

6 A. So my understanding it's -- it's a

7 [REDACTED]

8 Q. And [REDACTED] would mean that it had been

9 [REDACTED]

10 A. My understanding is that this 02:52:06  
11 capability -- that would mean that the capability

12 [REDACTED]

13 Q. And when you said that your  
14 "understanding of [REDACTED] means that the capability

15 [REDACTED] does that mean that 02:52:23

16 [REDACTED] the capability?

17 A. My understanding is that that means that  
18 [REDACTED] the capability in some  
19 way.

20 Q. If [REDACTED] a capability and 02:52:50  
21 determined that it should not be used, would [REDACTED]  
22 appear in column Q?

23 A. I'm not sure exactly how [REDACTED]  
24 [REDACTED] in this  
25 specific table. 02:53:17

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## HIGHLY CONFIDENTIAL

1 Q. Are the decisions that [REDACTED] makes 02:53:27  
2 pertaining to capabilities logged elsewhere at  
3 Facebook?

4 MR. SCHWING: Object to form. Outside  
5 the scope. 02:53:43

6 THE DEPONENT: My understanding is that  
7 the [REDACTED] to  
8 track [REDACTED].

9 Q. (By Mr. Melamed) Have you ever heard of  
10 the Launch Manager tool referred to as the lama 02:54:03  
11 (phonetic)?

12 A. My understanding is that tickets within  
13 the cap- -- the Launch Manager tool are often  
14 referred to as "lamas."

15 Q. What do you mean by "tickets within the 02:54:29  
16 Launch Manager tool"?

17 A. So the Launch Manager tool manages  
18 [REDACTED], and is  
19 also used by [REDACTED]. And a lama represents a  
20 [REDACTED] by those 02:54:58  
21 processes.

22 Q. Column R it has the header [REDACTED]  
23 and what does that mean?

24 A. My understanding is that that's the --  
25 the [REDACTED] in the 02:55:24

HIGHLY CONFIDENTIAL

1 capability tool. 02:55:28

2 Q. So for the capability in row 2, it was

3 [REDACTED] in the capability tool on [REDACTED]

4 at [REDACTED] is that right?

5 A. That's my understanding of what the -- of 02:55:44

6 what that column means.

7 Q. Column S is -- has the header

8 [REDACTED]

9 What does that mean?

10 A. This refers to a [REDACTED] 02:56:01

11 that existed before [REDACTED], and

12 this will refer to some kind of state within that

13 process.

14 Q. Do you know what is meant by the [REDACTED]

15 in row 2 for [REDACTED] 02:56:35

16 A. I do not know what's meant by -- by the

17 [REDACTED]

18 Q. Do you know what other types of entries

19 are reflected in column S for capabilities that

20 were created in the capability tool before [REDACTED] 02:56:55

21 A. I'm not aware of the [REDACTED]

22 [REDACTED] that -- that existed.

23 Q. Do you know who was involved in the

24 review noted in -- in column S before [REDACTED]

25 A. I do not know who was involved in the 02:57:32

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## HIGHLY CONFIDENTIAL

1 [REDACTED] that existed prior to -- to 02:57:36

2 [REDACTED]

3 Q. Who would you ask to determine who was  
4 involved in that process prior to [REDACTED]?

5 A. I would attempt to contact someone called 02:57:53  
6 Shirine, if she is indeed still at the company.

7 Q. Is Shirine's last name Sajjadi?

8 A. Yes, I'm referring to Shirine Sajjadi.

9 THE DEPONENT: Mr. Melamed, would now be  
10 a good time to take a break? We've been going for 02:58:21  
11 an hour and a half. I could -- I could do with a  
12 break, a quick break.

13 MR. MELAMED: Let's go off the record.

14 THE VIDEOGRAPHER: Okay. We're off the  
15 record. It's 2:58 p.m. 02:58:30

16 (Recess taken.)

17 THE VIDEOGRAPHER: We're back on the  
18 record. It's 3:33 p.m.

19 Q. (By Mr. Melamed) When we took a -- right  
20 before we took a break we were talking about 03:33:22  
21 column S in Exhibit 429, the [REDACTED]  
22 column, correct?

23 A. I think that's what we were talking --  
24 talking to before the break, yes.

25 Q. And just to confirm, do you have any 03:33:36

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HIGHLY CONFIDENTIAL

1 understanding of any of the values that could be 03:33:38  
2 entered in column S?

3 A. I know that the -- the entries are  
4 [REDACTED], and -- yeah, I know these are  
5 [REDACTED], but I'm not confident in precisely 03:33:59  
6 what they -- what they mean.

7 Q. Do you have any understanding of what the  
8 [REDACTED] mean?

9 A. I understand that there are -- they refer  
10 to some [REDACTED] that 03:34:16  
11 existed prior to [REDACTED].

12 Q. Do you have any understanding --  
13 understanding beyond that of what the [REDACTED]  
14 [REDACTED] in column S indicate?

15 A. That's my -- my understanding of what 03:34:34  
16 they -- what they refer to.

17 Q. Do you know how many [REDACTED] are  
18 available in the [REDACTED], column?

19 A. Not off the top of my head, I'm afraid.  
20 I can access that with a full document, but not off 03:34:49  
21 the top of my head.

22 Q. Just to be clear, do you have any meaning  
23 of what the numeric [REDACTED] indicates in row 2,  
24 column S?

25 A. I can't be sure what -- what a value of [REDACTED] 03:35:13

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HIGHLY CONFIDENTIAL

1 in column S indicates. 03:35:15

2 Q. And just to be clear, I'm not asking for  
3 sure; I'm just asking do you have any understanding  
4 of what [REDACTED] indicates in that -- in that field?

5 A. No, I'm not confident in what [REDACTED] indicates 03:35:27  
6 in that field.

7 Q. Go to column T. And the header in  
8 column T is [REDACTED]

9 What does that mean?

10 A. My understanding is that refers to the 03:35:48  
11 [REDACTED]  
12 this capability as part of a [REDACTED]  
13 that existed prior to [REDACTED]

14 Q. And so the [REDACTED] in column T is  
15 the [REDACTED] of that individual who [REDACTED] [REDACTED]

16 [REDACTED]  
17 A. That's my understanding, yes.

18 Q. Column U has the header

19 [REDACTED] "

20 What does that mean? 03:36:27

21 A. My understanding is that refers to the --  
22 to the UNIX time when the outcome of the prior to  
23 [REDACTED] process was conducted.

24 Q. Did you say "UNIX time," U-N-I-X?

25 A. Correct. UNIX time. 03:36:48

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## HIGHLY CONFIDENTIAL

1 Q. Can you describe what UNIX time is? 03:36:51

2 A. UNIX time is the number of seconds since  
3 the UNIX Epoch, which is considered to be the first  
4 of January 1970.

5 Q. So the value in row 2, column U reflects 03:37:07  
6 the number of seconds since January -- indicates  
7 the -- let me try and do this right.

8 The value entered in the cell in row 2,  
9 column U is the number of seconds that had elapsed  
10 since January 1, 1970. And that -- so that -- and 03:37:33  
11 that is the time at which the [REDACTED]  
12 [REDACTED] is that right?

13 A. That's my understanding, yes. It's a  
14 date time in what's commonly known as -- as UNIX  
15 time format. 03:37:56

16 Q. Column V header is

17 [REDACTED]  
18 What does that mean?

19 A. My understanding is that -- again, this  
20 is a UNIX time. UNIX time stamp, and refers to 03:38:16  
21 when this capability was [REDACTED]

22 [REDACTED] that existed prior to [REDACTED]

23 Q. And so the -- the temporal flow of those  
24 two columns is the first, the capability would be  
25 [REDACTED] as reflected in column V, 03:38:42

HIGHLY CONFIDENTIAL

1 and then the [REDACTED] as reflected 03:38:46  
2 in column U; is that correct?

3 A. That's my understanding of how the  
4 process works at a high level.

5 Q. Column W has "[REDACTED]." 03:39:03  
6 Do you understand what that means?

7 A. My understanding is, at a high level,  
8 that refers to the -- the [REDACTED] this  
9 capability [REDACTED]

10 Q. Do you know who was responsible for 03:39:34  
11 entering the content in column W for a given  
12 capability?

13 A. There were likely a number of people  
14 involved in -- in this [REDACTED] that  
15 existed prior to -- to [REDACTED] the information 03:39:56  
16 could have been entered by a number of people.

17 Q. Do you know any of the people who could  
18 have entered this in -- or who are within those --  
19 that set of people you identified as could -- could  
20 have possibly have been involved? 03:40:11

21 A. So this -- this is a -- my understanding  
22 is that this refers to a [REDACTED]  
23 that existed prior to [REDACTED]. I'm not -- you  
24 know, I'm not confident in the names of the people  
25 who would have been involved back in -- when this 03:40:43

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## HIGHLY CONFIDENTIAL

1 process was operating in 2017, '18. 03:40:47

2 Q. Do you see the value entered in column W,  
3 the privacy review reason for row 2 is an [REDACTED]

4 A. I see it's on the screen.

5 Q. Do you know what that means? 03:41:09

6 A. An [REDACTED] could have a number of  
7 meanings in different context.

8 Q. In this context do you know what it  
9 means?

10 A. Yeah, I can't be confident exactly what's 03:41:34  
11 meant by an [REDACTED] in this -- in this context. I  
12 think it only exists in a small number of rows.

13 Q. Do you know what other values could  
14 possibly be under [REDACTED]

15 A. My understanding this is -- this is some 03:42:01  
16 kind of the [REDACTED].

17 Q. So it's a [REDACTED]

18 A. I wouldn't say it's [REDACTED]  
19 but my understanding is that this -- this [REDACTED]

20 [REDACTED] 03:42:15

21 Q. Column X says [REDACTED]  
22 What does that mean?

23 A. My understanding is that that refers to a  
24 [REDACTED] as to

25 whether or not [REDACTED] to 03:42:42

HIGHLY CONFIDENTIAL

1 this capability [REDACTED] [REDACTED]  
[REDACTED] in order to be [REDACTED]  
3 Q. And what does "[REDACTED]" as indicated in  
4 row 2, under [REDACTED] indicate?  
5 A. My understanding is that that means that 03:43:12  
6 either the [REDACTED] -- it  
7 means that the [REDACTED] that  
8 it [REDACTED]  
9 Q. And what would -- let me withdraw that.  
10 Would "[REDACTED]" mean that the [REDACTED] had 03:43:27  
11 [REDACTED] to the capability did  
12 [REDACTED]  
13 A. My understanding that [REDACTED] in that column  
14 represents that the [REDACTED] at  
15 the point that this data was pulled that the 03:43:47  
16 [REDACTED] -- that for an app to have  
17 [REDACTED], that the developer had to  
18 [REDACTED].  
19 Q. Did Facebook -- well, let me withdraw  
20 that. 03:44:12  
21 Did Facebook track which developers had  
22 entered contracts for which capabilities?  
23 MR. SCHWING: Object to form.  
24 THE DEPONENT: Can you help me understand  
25 what -- what time period you're referring to here? 03:44:44

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HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) Sure. 03:44:48

2 From 2007 through present, did Facebook  
3 track which developers entered contracts for access  
4 to capabilities?

5 MR. SCHWING: Object to form. 03:45:13

6 THE DEPONENT: So Facebook [REDACTED]

7 [REDACTED]  
8 whether or not a developer has [REDACTED]

9 [REDACTED].

10 I'm not sure it's a precise legal term. Required 03:45:37  
11 for them to [REDACTED] to a given capability  
12 today.

13 Q. (By Mr. Melamed) So Facebook [REDACTED]

14 [REDACTED] in the

15 document we're looking at, correct, Exhibit 429, 03:45:53  
16 which is the Capability table?

17 A. This -- the Capability table today  
18 includes a [REDACTED]

19 [REDACTED]

20 [REDACTED] to have -- an [REDACTED] to have 03:46:12

21 [REDACTED] to it. That's [REDACTED] today.

22 Q. Was it tracked somewhere else before  
23 it -- let me withdraw that.

24 When you say "the capability table tracks

25 [REDACTED] 03:46:35

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HIGHLY CONFIDENTIAL

1 the developer to [REDACTED] in order 03:46:38  
2 to [REDACTED], " are all instances where  
3 [REDACTED] in  
4 this table for each capability in this table?

5 MR. SCHWING: Object to form. 03:47:01

6 THE DEPONENT: My understanding is that  
7 this -- this table represents Facebook's

8 [REDACTED]  
9 [REDACTED], and a process has been

10 [REDACTED] for the 03:47:22

11 [REDACTED] and the developers  
12 that [REDACTED]

13 Q. (By Mr. Melamed) Prior to -- withdraw  
14 that.

15 Was there a period of time for which the 03:47:48

16 Capability table did not [REDACTED] to a  
17 capability by an app [REDACTED]

18 [REDACTED]

19 MR. SCHWING: Object to form.

20 THE DEPONENT: The capability tool has -- 03:48:10

21 has changed and improved over time, and the data  
22 fields it -- it captures today were not there --  
23 were not all there when the tool was first  
24 developed in -- in around 2013.

25 Q. (By Mr. Melamed) When was this field 03:48:32

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## HIGHLY CONFIDENTIAL

1 added to the capabilities tool? 03:48:33

2 A. This field was likely added -- I -- I

3 can't be sure of the precise date on which the

4 capability tool was added. I'm sorry, this field

5 was added to the capability tool. Yeah, I can't be 03:48:53

6 sure of the exact date when this field was added.

7 There was -- as I -- as I say, the tool has evolved

8 over time, and different fields have been added at

9 different times.

10 Q. When this field was added, was 03:49:08

11 information about whether capabilities that were

12 already in the tool before it was added, updated

13 for this field? Let me restate this.

14 So we're talking -- we've been using

15 row 2 as an example. And we saw earlier, I think 03:49:33

16 the capability in row 2 was created in this tool in

17 August of 2013.

18 Does that sound correct?

19 A. Sorry, say that again. The --

20 Q. In row 2 -- 03:49:48

21 A. Uh-huh.

22 Q. -- of Exhibit 429, the capability -- it

23 indicated the capability was added in 2013; is that

24 your recollection?

25 A. Can we look at that data. 03:50:12

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## HIGHLY CONFIDENTIAL

1 Q. We'll go back. There we go. So it was 03:50:13

2

3 correct?

4 A. That's my understanding, yes.

5 Q. Okay. And do you know if that's before 03:50:28

6 column X was added to the capability tool?

7 A. My understanding is that the -- that

8 column X was added or the data -- the column -- the

9 field represented by column X was added after 2013.

10 Q. So in order to generate an entry, for 03:50:51

11 column X for the capability in row 2 -- let me --

12 let me withdraw that.

13 You see that column X has an entry for

14 the capability in row 2, correct?

15 A. I see column X in row 2 has -- has an 03:51:15

16 entry.

17 Q. Do you know whether -- for each

18 capability that existed in the capability tool

19 before column X was added, there is an entry in the

20 field for column X? 03:51:33

21 MR. SCHWING: The document speaks for

22 itself.

23 THE DEPONENT: Sorry, I'm not sure -- I'm

24 not sure I fully understand the question. Can

25 you -- can you ask it again? 03:51:52

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) I'm just trying to 03:51:55  
2 understand, and I'll state this more plainly.

3 The -- is information on cap- -- capabilities as  
4 reflected in the Capability table concerning

5 [REDACTED] for 03:52:11  
6 each capability, reflected in the Capabilities  
7 table?

8 A. My understanding is that column X  
9 reflects Facebook's [REDACTED]  
10 the [REDACTED] to be [REDACTED]  
11 [REDACTED] at the time that -- that the table  
12 you're looking at here was -- was generated.

13 Q. So column X is a snapshot in time of  
14 when -- reflecting the information as of the date  
15 and time that this table was pulled from the 03:52:54  
16 capabilities tool?

17 A. Yes, this -- it's in Excel spreadsheet,  
18 so it's a static representation of the -- of the  
19 data and the tool at the time it was generated.

20 Q. Did Facebook track whether capabilities 03:53:14  
21 [REDACTED] in any other internal tool?

22 MR. SCHWING: Object to form.

23 THE DEPONENT: Again, in what time  
24 period? Like before this field was added?

25 Afterwards? 03:53:43

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) Let's start with before 03:53:45  
2 this field was added.

3 A. I'm not aware of -- of a -- of a Boolean  
4 [REDACTED] -- in another tool relating  
5 to whether or not a specific capability required 03:54:03  
6 the contract.

7 Q. Are you aware of any other field being  
8 tracked in another tool regarding -- let me  
9 withdraw that.

10 Are you aware of any information 03:54:17  
11 regarding [REDACTED] for an  
12 app to [REDACTED] that existed before  
13 this field was added to the capabilities tool?

14 MR. SCHWING: Object to form.

15 THE DEPONENT: My recollection is that on 03:54:41  
16 some occasions the description of the capability  
17 would identify [REDACTED]  
18 [REDACTED]

19 Q. (By Mr. Melamed) The description of the  
20 capability in what -- in -- let me restate that. 03:54:54

21 The description of the capability where?

22 A. The description of the -- in my answer  
23 there, I'm referring to the description of the  
24 capability in the capability tool.

25 Q. Is it your understanding that the 03:55:17

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HIGHLY CONFIDENTIAL

1 description of the capability in the capability 03:55:18

2 tool, always indicated [REDACTED]

3 [REDACTED] prior to the

4 addition of column X in the capabilities tool?

5 MR. SCHWING: Object to form. 03:55:34

6 THE DEPONENT: I can't say for certain

7 that if the capability [REDACTED] before

8 that column was added that that would always be

9 captured in the description of the capability in

10 the capability tool. 03:55:52

11 Q. (By Mr. Melamed) Did Facebook track all

12 of the capabilities that an [REDACTED]

13 [REDACTED] by app?

14 MR. SCHWING: Object to form.

15 THE DEPONENT: [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 Q. (By Mr. Melamed) Was there a tool to

19 track the capabilities of each third-party

20 developer [REDACTED]? 03:56:39

21 A. I don't recall or know of a specific tool

22 that was used to track [REDACTED]

23 [REDACTED]

24 Q. So for instance, if I wanted to determine

25 what con- -- what capabilities Netflix had entered 03:57:12

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1 [REDACTED] . 03:57:19

2 Was there an internal tool available at  
3 Facebook that would allow me to look up Netflix and  
4 that would identify each of the capabilities  
5 Netflix [REDACTED] [REDACTED]  
6 [REDACTED]

7 A. A tool that performs that function --

8 MR. SCHWING: Simon?

9 THE DEPONENT: Sorry.

10 MR. SCHWING: Just -- sorry, let me state 03:57:46

11 my objection.

12 Object to form.

13 Go ahead.

14 THE DEPONENT: My understanding is that a  
15 tool that would perform that function exists today. 03:57:52

16 Q. (By Mr. Melamed) And what is that tool?

17 A. My understanding is that tool is known as

18 [REDACTED]

19 Q. When was that tool created at Facebook?

20 Let me restate that. 03:58:12

21 When did Facebook first start using that  
22 tool?

23 MR. SCHWING: Outside the scope. Object  
24 to form.

25 THE DEPONENT: My understanding is a 03:58:25

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1 [REDACTED] a -- a standard tool used by 03:58:26  
2 many -- there are several -- [REDACTED] at  
3 Facebook to [REDACTED]

4 [REDACTED]  
5 Q. (By Mr. Melamed) And when did Facebook 03:58:44  
6 start using that tool to track the capabilities  
7 that a -- a third-party developer had [REDACTED]

8 [REDACTED]  
9 A. My understanding is that the [REDACTED]  
10 [REDACTED] was integrated with the [REDACTED] at I 03:59:04  
11 think in around 2019.

12 Q. Before the [REDACTED] was integrated  
13 with the [REDACTED], was there a tool used  
14 internally at Facebook to track whether apps had  
15 [REDACTED]? 03:59:43

16 MR. SCHWING: Object to form.

17 THE DEPONENT: My understanding is that  
18 the [REDACTED]  
19 that had been [REDACTED]

20 [REDACTED] which governed their -- 04:00:02  
21 their use of the platform.

22 Q. (By Mr. Melamed) Did they use a tool  
23 that enabled them to look up which capabilities the  
24 individual developer had [REDACTED] in

25 [REDACTED] 04:00:22

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HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to form. 04:00:28

2 THE DEPONENT: Again, the tools that a

3 [REDACTED] would have -- would have

4 evolved significantly over time. Certainly my

5 understanding in -- in around 2013 and '14, was 04:00:42

6 that the [REDACTED]

7 [REDACTED], that -- that

8 Facebook had [REDACTED]

9 [REDACTED] relating to their use of the

10 platform. 04:01:06

11 Q. (By Mr. Melamed) And did the [REDACTED]

12 [REDACTED] that would enable them to look up by

13 developer which capabilities that developer [REDACTED]

14 [REDACTED] prior

15 to the implementation of the [REDACTED] 04:01:27

16 MR. SCHWING: Object to form.

17 THE DEPONENT: My understanding is that

18 [REDACTED] would have had access to the -- to the

19 [REDACTED] to

20 see, for a given set of [REDACTED] [REDACTED]

21 [REDACTED] to those applications.

22 Q. (By Mr. Melamed) Where in the

23 capabilities tool does it indicate whether a

24 [REDACTED]

25 A. Today in the capability tool on the page 04:02:27

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## HIGHLY CONFIDENTIAL

1 that represents a capability, that field is 04:02:31  
2 displayed.

3 Q. [REDACTED] in column X; is that  
4 correct?

5 A. My understanding is the -- what's been 04:02:44  
6 exported here in this table represents the same  
7 information that would be shown in the capability  
8 tool today.

9 Q. And you testified earlier that column X  
10 did [REDACTED] was added to the capabilities 04:02:58  
11 tool in or around 2019, right?

12 A. That's broadly my understanding, although  
13 I can't be sure of the precise date on which  
14 that -- when that field was added.

15 Q. Before that field was added, where in the 04:03:16  
16 capabilities tool did it indicate whether a  
17 [REDACTED] ?

18 MR. SCHWING: Asked and answered. Object  
19 to form.

20 THE DEPONENT: Before that field was 04:03:35  
21 added, there was no specific field in the  
22 capability tool that indicated whether or not a  
23 [REDACTED]. As I mentioned earlier, my  
24 recollection is that some capabilities, that  
25 information was captured at a previous time in the 04:03:55

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1 description field for the given capability. 04:04:01

2 Q. (By Mr. Melamed) Going back to the  
3 [REDACTED] which you testified was used  
4 starting in or around 2019. Well, let me start  
5 there. 04:04:15

6 That's -- am I correctly stating that you  
7 testified that the [REDACTED] started to be  
8 used in or around 2019? That's my recollection of  
9 when the [REDACTED] was integrated into the  
10 [REDACTED]. Do you know whether -- when the 04:04:33  
11 [REDACTED] was integrated into the [REDACTED]  
12 [REDACTED]; i.e.,  
13 [REDACTED],  
14 were entered into that tool?

15 A. My understanding is that part of the 04:05:13  
16 [REDACTED], as that was implemented  
17 there was a review of prior capability grants, and  
18 an attempt to determine whether or not an  
19 [REDACTED].

20 Q. So am I right to understand that though 04:06:12  
21 the [REDACTED] was implemented -- I'm sorry --  
22 was integrated in or around 2019 with the -- with  
23 the [REDACTED], the information in the  
24 [REDACTED] predates the integration?

25 MR. SCHWING: Object to form. 04:06:45

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) Let me restate that. 04:06:47

2 That was a poorly phrased question.

3 Am I right to understand that when the

4 [REDACTED] was integrated with the [REDACTED]

5 [REDACTED] there was an attempt made to bring 04:06:57

6 historical information regarding [REDACTED]

7 [REDACTED] into that tool?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: My understanding is that

10 there was an -- an effort undertaken to identify 04:07:17

11 [REDACTED] and the

12 grants of capabilities or the access to

13 capabilities that it was then [REDACTED]

14 [REDACTED]

15 And then to remove those capabilities or 04:07:41

16 ensure [REDACTED]

17 Although precisely which tool were used to -- to --

18 to execute that process, the [REDACTED] was

19 likely involved in some way.

20 MR. MELAMED: I'll note for the record 04:08:10

21 that we're going to follow up with Facebook

22 regarding production of the [REDACTED] or

23 relevant information from the [REDACTED]

24 Q. (By Mr. Melamed) Column Y has a header

25 [REDACTED] 04:08:28

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1 What does that mean? 04:08:37

2 A. My understanding is first of all that  
3 this column doesn't contain any data. And also my  
4 understanding is that this refers to a [REDACTED]

5 [REDACTED] by which the [REDACTED] to the 04:08:56

6 [REDACTED] for this -- for this specific  
7 capability would have been stored, or could have  
8 been stored.

9 Q. Was there a point in time at which there  
10 were values entered into the [REDACTED] 04:09:19  
11 field?

12 A. It's possible that there were values  
13 there. It's also possible that this was a field  
14 added by a developer or by an engineer in -- in  
15 anticipation of a process which ended up being 04:09:42  
16 operationalized a different way.

17 Q. Okay. I'm going to scroll over a few.  
18 Just so we get contact. Sorry, I didn't  
19 mean to do that.

20 Okay. So my screen just collapsed the 04:10:15  
21 columns where I had to stretch them out, but we're  
22 on column Z, which is [REDACTED]

23 What is meant by [REDACTED]

24 A. My understanding is that [REDACTED]  
25 refers to a [REDACTED] that was 04:10:38

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1 performed in around 2018 or so. 04:10:47

2 Q. So prior to that cate- -- [REDACTED]

3 [REDACTED] that was performed in around 2018

4 or so, is it accurate that [REDACTED] was not

5 reflected in the Capability table? 04:11:10

6 A. [REDACTED] here refers to the -- the [REDACTED]

7 [REDACTED] around this -- when

8 this -- when this effort was conducted in around

9 2018, so the -- the concept of [REDACTED] did

10 not -- as it -- as it's represented here did not 04:11:38

11 exist before then, as I understand it.

12 Q. How were the [REDACTED] in or

13 around 2018?

14 MR. SCHWING: Object to form. Outside

15 the scope. 04:11:51

16 THE DEPONENT: My understanding, a [REDACTED]

17 [REDACTED] came up with a [REDACTED]

18 [REDACTED] against that

19 [REDACTED]

20 Q. (By Mr. Melamed) What is indicated by 04:12:11

21 the values in column Z?

22 MR. SCHWING: Object to form.

23 MR. MELAMED: Let me -- let me restate

24 that, or ask a different question.

25 Q. (By Mr. Melamed) In row 2, column Z, the 04:12:25

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1 [REDACTED] 04:12:28

2 Do you see that?

3 A. I see "[REDACTED]" in the column, yeah.

4 Q. What does [REDACTED] mean in this context?

5 A. My understanding is, that in this 04:12:42

6 context, [REDACTED] means a [REDACTED]

7 Q. So the numerical entry in the field

8 reflects a [REDACTED] along -- is a [REDACTED]

9 [REDACTED] is that correct?

10 A. My understanding is that there are -- 04:13:04

11 there are [REDACTED] for -- for [REDACTED]

12 [REDACTED] Although I can't be confident whether

13 they're necessarily sequential.

14 Q. I'm sorry.

15 So your testimony is that there are [REDACTED] [REDACTED]

16 [REDACTED] is that true?

17 A. My understanding is that there were --

18 this column relates to a -- a [REDACTED]

19 [REDACTED]

20 Q. And were those [REDACTED] designated by the 04:13:43

21 [REDACTED]

22 A. My understanding is that the [REDACTED] here

23 would refer to one of the [REDACTED]

24 Q. Right.

25 And do you know the other numbers that 04:13:58

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1 would reflect [REDACTED] that could be entered in 04:14:03  
2 this field?

3 A. I can remember that I was low, and I can  
4 remember that [REDACTED] but I -- I  
5 don't recall hearing the precise names of the other 04:14:24  
6 [REDACTED].

7 Q. What is a "[REDACTED]" in this context?

8 A. [REDACTED]

9 Q. And what does that mean in the context of  
10 [REDACTED]? 04:14:42

11 MR. SCHWING: Object to form.

12 THE DEPONENT: My understanding is that

13 that would refer to a [REDACTED] -- a specific [REDACTED]

14 [REDACTED] having been created in Facebook's [REDACTED]

15 [REDACTED] 04:15:05

16 Q. (By Mr. Melamed) What did it mean to  
17 create a [REDACTED] What -- did -- let me  
18 withdraw that.

19 When a [REDACTED] was created in

20 [REDACTED] you said one reflected 04:15:19

21 the [REDACTED] -- the [REDACTED] in column Z,  
22 correct?

23 A. No, I said that [REDACTED], not

24 [REDACTED].

25 Q. Did [REDACTED] represent a [REDACTED] 04:15:44

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: Object to form. 04:15:55

2 THE DEPONENT: As I said, I -- my  
3 understanding is that [REDACTED], if my  
4 recollection serves correctly. But I don't know if  
5 that's necessarily [REDACTED]. 04:16:07

6 Q. (By Mr. Melamed) Who would you ask if  
7 you wanted to understand what the numbers meant in  
8 column Z in terms of the [REDACTED]  
9 indicated?

10 MR. SCHWING: Object to form. 04:16:34

11 THE DEPONENT: Do I understand the -- the  
12 details of the data represented in this column I  
13 would speak to Mr. Molaro in the first instance.

14 Q. (By Mr. Melamed) Just to be clear, I'm  
15 not asking about the details of what made this 04:16:52  
16 particular capability a 1. I'm just trying to  
17 understand what the values that could be entered in  
18 this column meant.

19 And my understanding your testimony,  
20 please correct me if I'm wrong, is that there were 04:17:06  
21 6 potential values that could be entered here. [REDACTED]

22 reflected a [REDACTED] [REDACTED]  
23 But other than -- is that correct so far?

24 A. That's correct so far as per my -- my  
25 recollection. I -- I've reviewed many documents 04:17:28

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1 and many things in preparation for today's 04:17:30  
2 testimony, and -- and remembering every -- every  
3 reflection of everything that a -- would have been  
4 represented -- would have meant by the numbers in  
5 this table is -- I just don't have it in my head 04:17:49  
6 right now.

7 Q. Fair enough.

8 I'm not here to argue about whether you  
9 should have done more or less, but I am just asking  
10 for your testimony about this. 04:17:57

11 A. That's my understanding of what those --  
12 what those fields mean. I -- I recall there being  
13 [REDACTED], and I -- I recall [REDACTED]

14 [REDACTED] Those are the details behind that.

15 Q. And do you recall whether the remaining 04:18:13  
16 [REDACTED] were indicated by the [REDACTED]

17 [REDACTED]  
18 A. My understanding is that risk level is --  
19 is a 1, [REDACTED] field.

20 But, again, I -- I -- I'm not sure it's 04:18:31  
21 necessarily entirely linear in terms of [REDACTED]  
22 My understanding is that different [REDACTED]  
23 refer to different [REDACTED] not necessarily

24 [REDACTED]

25 Q. That's very helpful. Thank you. 04:18:54

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1 Do you know what types of [REDACTED] [REDACTED]  
2 [REDACTED] to?  
3 MR. SCHWING: Object to form.  
4 THE DEPONENT: The two that I can  
5 remember is [REDACTED] I don't recall 04:19:08  
6 what -- what the others -- what the other [REDACTED]  
7 [REDACTED] referred to.  
8 Q. (By Mr. Melamed) Is there a document  
9 somewhere within Facebook that reflects what the  
10 [REDACTED] in column Z of Exhibit 429 Capability 04:19:22  
11 table mean?  
12 MR. SCHWING: Object to form.  
13 THE DEPONENT: My understanding is -- my  
14 understanding is that more detail on that may have  
15 already been provided -- as -- as part of the 04:19:44  
16 metadata for these tables, when they were produced  
17 in this case.  
18 Q. (By Mr. Melamed) Just to be clear, your  
19 understanding is that the indication of what is  
20 meant by each [REDACTED] in column Z is reflected 04:20:03  
21 in the metadata of the Full table of which  
22 Exhibit 429 is an excerpt?  
23 MR. SCHWING: Object to form.  
24 THE DEPONENT: Let me -- let me restate  
25 that. My understanding is -- is that -- these 04:20:24

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1 tables being produced to you, there was also 04:20:27  
2 information describing the fields that were  
3 produced to you. And I think it's possible, though  
4 I, again, can't say for certain that more  
5 information about these [REDACTED] may well be 04:20:43  
6 contained in these documents.

7 Q. (By Mr. Melamed) I think I located what  
8 you were talking about. And this is a description  
9 from counsel of what the [REDACTED] were in this  
10 column. And I'd like to go through these with you 04:21:32  
11 and see if this is an accurate reflection of what  
12 these meant.

13 [REDACTED], correct?

14 A. [REDACTED] represented  
15 [REDACTED] But, again, I'm going off memory here. 04:21:49

16 Q. [REDACTED] that  
17 right?

18 A. As I mentioned previously, I -- I don't  
19 recall the -- the various other [REDACTED]. If  
20 you have the document, maybe it would useful to put 04:22:05  
21 it on the screen.

22 Q. It's not a document that's been produced  
23 in this case. It's an attachment to the email  
24 provided by counsel. So it's not -- it hasn't been  
25 produced by Facebook. So that's why I'm asking you 04:22:16

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1 these questions. 04:22:19

2 It indicated the -- the attachment to the  
3 email provided by Facebook indicates that [REDACTED]

4 [REDACTED].

5 Do you have any reason to -- to doubt 04:22:32

6 that that is an accurate recollection of what [REDACTED]  
7 indicated?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: As I sit here today, I  
10 have -- I have no reason to doubt it. 04:22:46

11 Q. (By Mr. Melamed) And just to be clear,  
12 it's "[REDACTED] I don't know if that changes  
13 your answer in that regard.

14 A. Again, I -- I don't recall the specifics  
15 of the -- of the [REDACTED] here. 04:23:00

16 Q. Do you know what [REDACTED] " means in  
17 this context?

18 A. [REDACTED] in general would refer to --  
19 typically refer to [REDACTED]

20 [REDACTED] 04:23:18

21 Q. Okay. [REDACTED] according to the  
22 communication we received from counsel, is

23 [REDACTED]

24 MR. SCHWING: Object to form. I'll just  
25 object once to this line of questioning asking 04:23:33

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1 about a document that isn't placed before the 04:23:36  
2 witness.

3 MR. MELAMED: Sure.

4 Q. (By Mr. Melamed) Just to repeat, ■ is

5 ■ 04:23:44

6 Do you know what ■  
7 means?

8 A. Typically that would refer to ■

9 ■

10 Q. What is the difference between 04:24:06

11 ■

12 A. I can't be sure of the difference between  
13 those two determinations, I'm afraid.

14 Q. Who would you ask to determine the  
15 difference between those two descriptions? 04:24:27

16 A. I would speak to Mr. Molaro in the first  
17 instance.

18 Q. ■

19 Does that sound correct to you?

20 MR. SCHWING: Object to form. 04:24:43

21 THE DEPONENT: Again, I -- I don't recall  
22 these -- these -- this level of detail  
23 specifically.

24 Q. (By Mr. Melamed) Do you understand --

25 A. I have no reason to doubt it. 04:24:55

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## HIGHLY CONFIDENTIAL

1 Q. I apologize for cutting you off. 04:24:56

2 Do you understand what [REDACTED] means in  
3 this context?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: I -- I don't have a 04:25:09

6 canonical definition of this in a personal  
7 capacity. I -- to me that would make sense, this  
8 [REDACTED], but I can't be  
9 sure what -- what's meant by [REDACTED] in this  
10 context. 04:25:25

11 Q. (By Mr. Melamed) The communication  
12 indicates that [REDACTED]  
13 [REDACTED]

14 Do you understand what is meant by "[REDACTED]"  
15 in the context of [REDACTED] in Exhibit 429? 04:25:40

16 MR. SCHWING: Object to form.

17 THE DEPONENT: Again, this is referring  
18 to a -- some form of a [REDACTED] that was  
19 created in around 2018. That's my understanding of  
20 what [REDACTED] refers to. And, also my understanding is 04:26:00  
21 that this [REDACTED]  
22 at the company.

23 Q. (By Mr. Melamed) Who created the [REDACTED]  
24 [REDACTED] in 2018?

25 A. My understanding is -- there was a 04:26:18

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1 [REDACTED] to -- a [REDACTED] 04:26:18

2 [REDACTED] to -- [REDACTED]

3 [REDACTED]s, and that my understanding is that

4 it's likely that group came up with the -- the

5 [REDACTED] 04:26:28

6 Q. Who is in that [REDACTED]

7 MR. SCHWING: Object to form. Outside  
8 the scope.

9 THE DEPONENT: Yeah, I'm not sure of the  
10 specific names of the people that were involved in 04:26:44

11 [REDACTED] four years ago.

12 So, yeah, I wouldn't want to give --  
13 speculate as to the names of people that were  
14 involved.

15 Q. (By Mr. Melamed) As you sit here today, 04:26:53

16 you don't know the -- do you know the names of any  
17 individuals who were involved in that [REDACTED]

18 [REDACTED]

19 A. I couldn't 100 percent confirm whether or  
20 not a particular individual was involved in -- in 04:27:08  
21 the [REDACTED] that met to come up with this  
22 classification.

23 Q. Who would you ask if you wanted to find  
24 out who was involved in [REDACTED] that come  
25 up with this [REDACTED] 04:27:24

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1 MR. SCHWING: Object to form. 04:27:29

2 THE DEPONENT: Yeah, I would speak to  
3 Mr. Molaro in the first instance.

4 Q. (By Mr. Melamed) Back to Exhibit 429,  
5 column AA, has the header 04:27:45

6 [REDACTED]

7 What does that mean?

8 A. My understanding is that -- some of the  
9 capabilities there would be information entered  
10 into the tool [REDACTED] -- or 04:28:11

11 [REDACTED] to be [REDACTED]

12 [REDACTED] capability.

13 Q. Were the values in this field free-form  
14 entries?

15 A. My understanding, having reviewed this 04:28:42  
16 document in -- in preparation, is that -- this was

17 [REDACTED].

18 Q. Do you know who entered the  
19 information -- let me preface this by saying I'm  
20 not looking for any specific person who entered 04:28:59  
21 specific information as to a specific capability.

22 So with that preface, do you know who  
23 would have been responsible for entering  
24 information in column AA regarding

25 [REDACTED] for capabilities as 04:29:16

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1 reflected in the field? 04:29:21

2 MR. SCHWING: Object to form.

3 THE DEPONENT: My understanding is that

4 [REDACTED] are the determinants of --

5 of which [REDACTED]

6 [REDACTED] to be [REDACTED]

7 [REDACTED] a given capability.

8 Q. (By Mr. Melamed) Am I right to

9 understand that the -- the entries in the [REDACTED]

10 [REDACTED] when those entries exist, were

04:29:51

11 entered by [REDACTED]

12 A. My understanding is [REDACTED] are

13 the -- are the people responsible for determining

14 [REDACTED]. It doesn't

15 necessarily mean that an individual on the [REDACTED]

16 [REDACTED] the tool.

17 Q. They may have provided it to somebody

18 else who entered into it the tool.

19 A. They may have provided it to somebody

20 else who entered it into the tool.

04:30:24

21 Q. Did this column, [REDACTED]

22 [REDACTED] exist at the inception of the capabilities

23 tool?

24 A. This field did not exist in 2013, which

25 is when I understand that the -- the capabilities

04:30:49

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## HIGHLY CONFIDENTIAL

1 tool is today was -- was built. 04:30:53

2 Q. When was this field added to the  
3 capabilities tool?

4 A. I think -- I think this is one of the  
5 fields added in -- in around 2018 or later when the 04:31:06  
6 capability tool was -- was improved at the time.

7 Q. When this field was added to the  
8 capabilities tool, were entries regarding [REDACTED]  
9 [REDACTED] for capabilities that preexisted  
10 the [REDACTED] added into the 04:31:32  
11 capabilities tool?

12 A. Sorry, can you ask that again.

13 Q. When this field was created as part of  
14 the capabilities tool, their exists -- their  
15 existed a series of capabilities that had already 04:32:01  
16 been entered into the tool by that date, correct?

17 A. My understanding is that when this field  
18 was -- this field was added later, then the  
19 capability tool being created and being in use and  
20 so yes, my understanding is that when this field 04:32:22  
21 was added there were a number of capabilities  
22 already in the tool.

23 Q. Did any of those capabilities that were  
24 already in the tool [REDACTED]

25 A. There -- there -- there would have been 04:32:50

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1 capabilities in the tool that, then, [REDACTED] 04:32:52  
2 [REDACTED] who was expected that [REDACTED]  
3 [REDACTED] would need to [REDACTED]  
4 [REDACTED] in order to access.

5 Q. So when this field was created, when the 04:33:05  
6 details about the [REDACTED]  
7 [REDACTED] in order  
8 to access the capability entered into this field?

9 A. My understanding from -- from reading  
10 this document, is there are not that many entries 04:33:28  
11 [REDACTED] details  
12 field. So my understanding is that the data entry  
13 would not have necessarily been comprehensive.

14 Q. Did the data regarding the [REDACTED]  
15 [REDACTED] access capabilities 04:33:51  
16 evolved in any other document at Facebook?

17 MR. SCHWING: Object to form.

18 THE DEPONENT: As I mentioned previously,  
19 my recollection is that on some occasions the  
20 description fields of the capability and the tool 04:34:17  
21 may have included information about the [REDACTED]

22 [REDACTED] that -- that may

23 [REDACTED]

24 Q. (By Mr. Melamed) Was that information  
25 included anywhere else in Facebook, other than in 04:34:29

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1 the contract itself? 04:34:33

2 MR. SCHWING: Object to form.

3 THE DEPONENT: I can't say for -- for

4 certain if it was stored at any time in -- in -- in

5 anywhere else. I don't -- I'm not aware of a tool 04:34:51

6 that's structured this information in that way.

7 Q. (By Mr. Melamed) Column AB has the

8 header [REDACTED]

9 What does that mean?

10 A. My understanding is that this is another 04:35:19

11 [REDACTED] which for some capabilities tends

12 to [REDACTED] for which

13 this capability [REDACTED]

14 Q. In circumstances where there's an entry

15 in the [REDACTED] field, who is 04:35:38

16 responsible for [REDACTED] as

17 reflected in the tool?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: My understanding is

20 that -- is that a [REDACTED] -- 04:35:56

21 well, today, [REDACTED] is responsible for -- my

22 understanding is that today, and since the process

23 was introduced in 2019 the [REDACTED] is

24 responsible for [REDACTED]

[REDACTED] 04:36:20

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## HIGHLY CONFIDENTIAL

1 Q. (By Mr. Melamed) Prior to 2019 was the 04:36:21  
2 [REDACTED] column part the capabilities  
3 tool?

4 A. My understanding is that the [REDACTED]  
5 [REDACTED] column or field was added again sometime 04:36:37  
6 in -- in 2018 or so.

7 Q. The header of column AC is

8 [REDACTED]  
9 What does that mean?

10 A. My understanding of this column -- is -- 04:37:10  
11 is similar to the previous one, which is the -- the  
12 sum capabilities. This is a [REDACTED]  
13 [REDACTED] where it would [REDACTED]  
14 [REDACTED] this capability to an app.

15 Q. Was this field also introduced in 2019? 04:37:33

16 A. My understanding this is -- again, as  
17 I've mentioned previously I -- I can't be accurate  
18 on the specific dates of when these fields were  
19 producing, but my understanding is that this is one  
20 of the fields, additional fields that was 04:37:52  
21 introduced in around 2018.

22 Q. And is the [REDACTED] responsible  
23 for entries in this field where the entries exist?

24 A. Today my understanding is that the  
25 [REDACTED] is responsible for articulating at 04:38:13

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1 [REDACTED] -- sorry -- 04:38:16

2 [REDACTED]

3 [REDACTED] But

4 I can't be, you know -- that doesn't necessarily

5 mean that's what -- what's reflected in this tool 04:38:30

6 is -- is -- an articulation that that group

7 created.

8 Q. Is the intent that what is reflected in

9 fields "[REDACTED]" and "[REDACTED]"

10 [REDACTED] reflect the articulations that [REDACTED] [REDACTED]

11 [REDACTED]s has engaged in regarding each capability?

12 MR. SCHWING: Object to form. Outside

13 the scope.

14 THE DEPONENT: Again, my understanding is

15 the -- that these fields attempt -- are supposed to 04:39:16

16 represent the [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 Q. (By Mr. Melamed) And during the history

20 of these -- these fields [REDACTED] 04:39:35

21 use in the capabilities tool, who was -- who or

22 what groups had been responsible for define --

23 defining the [REDACTED]?

24 A. My understanding is that prior to [REDACTED] --

25 the [REDACTED], it would have been a 04:40:02

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1 combination of [REDACTED] and then the 04:40:05

2 [REDACTED] that would have come up with

3 [REDACTED] the capability -- [REDACTED]

4 [REDACTED]

5 [REDACTED]

04:40:27

6 Q. Were the [REDACTED] that were -- that you

7 just referred to reflected in the capabilities tool

8 at any point in time? And by the -- by the ones

9 you just referred to, I mean the [REDACTED]

10 [REDACTED]

[REDACTED]

11 [REDACTED]

12 A. This table contains -- these columns

13 contain information. It's not, you know, plausible

14 for me to determine from this when that information

15 was added to the tool or -- and, therefore, you

04:41:13

16 know, which group or entity would have been

17 responsible for creating it. It's -- it's hard for

18 me to give that level of detail from this

19 information.

20 Q. Am I right to understand your testimony

04:41:24

21 that this column, the [REDACTED]

22 column was added in or around 2019?

23 A. I can't be sure exactly when it was

24 added. My understanding is it's one of the columns

25 that was added in -- in around 2018. But, again,

04:41:45

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1 I -- I'm not confident in exactly when this column 04:41:50  
2 was added to the table -- sorry, to the tool.

3 Q. Column AD has the header

4

5 What does that mean? 04:42:07

6 A. My understanding is that that refers to  
7 the [REDACTED]

8 Q. What is the [REDACTED] within the  
9 [REDACTED]?

10 MR. SCHWING: Object to form. 04:42:36

11 THE DEPONENT: Yeah. Sorry, Austin.

12 So the -- the best place to go to get  
13 that definition would -- would be the -- the [REDACTED]  
14 [REDACTED]. I can give my -- my understanding  
15 of it, which is that it defines -- 04:42:51

16 MR. SCHWING: I'm sorry, Mr. Cross, just  
17 don't reveal anything that you've learned from  
18 attorneys with respect to the [REDACTED].  
19 If you have independent factual knowledge with  
20 respect to it, you may provide that. 04:43:09

21 THE DEPONENT: Thank you, Austin.

22 My understanding is that it -- it defines

23

24 [REDACTED], and then there is a

25 determination made as to whether or not an [REDACTED] 04:43:27

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1 [REDACTED] of that 04:43:36  
2 definition. And my understanding is that this  
3 column reflects [REDACTED]

4 [REDACTED].

5 Yeah, I'm -- I'm not like -- there's likely a 04:43:56  
6 better definition than the one I was able to give  
7 you there, that's -- that's -- that's the best  
8 understanding I have of what it means.

9 Q. (By Mr. Melamed) Do you know if [REDACTED] is a  
10 reference to a [REDACTED]? 04:44:09

11 A. My understanding is the term comes from  
12 within the [REDACTED] but I couldn't  
13 confirm if it was a -- a [REDACTED]. But  
14 my understanding is that that refers to some

15 [REDACTED] [REDACTED]  
16 [REDACTED]

17 Q. And so if you look at row 2, the value  
18 for in scope for [REDACTED]

19 What does that mean?

20 A. My understanding is that that means that 04:44:46  
21 this [REDACTED]

22 Q. And if the capability -- a different  
23 capability in the Capability table was in scope for

24 [REDACTED]

25 A. My understanding is that if that column 04:45:10

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1 contains a "[REDACTED]" that means the capability has 04:45:12

2 been [REDACTED]

3 Q. Do you know who conducted the assessments

4 to determine whether a capability [REDACTED]

5 [REDACTED] 04:45:22

6 A. My understanding is that that would have

7 been an [REDACTED]

8 [REDACTED]

9 Q. Do you know if there exists a -- a

10 separate log of capabilities that indicated whether 04:45:42

11 the group of capabilities goes [REDACTED]

12 MR. SCHWING: Object to form.

13 THE DEPONENT: I'm sorry. I'm not sure

14 I -- I understand the question. Can you help me

15 with what you mean by "group of capabilities." 04:46:18

16 Q. (By Mr. Melamed) Sure.

17 Do you know if there exists a list

18 separate from the Capability table of the

19 capabilities that were determined to be [REDACTED]

20 [REDACTED] 04:46:30

21 MR. SCHWING: Object to form. Outside

22 the scope.

23 THE DEPONENT: My understanding is

24 that -- the capabilities tool -- the -- the

25 information contained in this table represents 04:46:45

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1 Facebook's determination as to whether or not a 04:46:49

2

3 Q. (By Mr. Melamed) Column AE has the

4 header

5 What does that mean?

04:47:08

6 A. My understanding is that that refers to

7 similar to the column we reviewed earlier about the

8 which would refer to the

9

10 Q. So the number reflected in the cell row 2

04:47:37

11 in column AE identifies the

12

13 A. I think it refers to either an

14

15 It may refer to a

16 I'm not entirely sure.

17 But my understanding is that it refers to

18 the in some way which would refer to

19 either an

20

04:48:24

21 Q. Okay.

22 MR. MELAMED: So that completes -- I just

23 have a few more questions about the capabilities

24 tool, generally. That completes the specific

25 column by column review of these. Are you okay to

04:48:32

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1 go a few more minutes while I ask these questions 04:48:37  
2 and then we can take a break?

3 THE DEPONENT: Yes, happy to proceed.

4 MR. MELAMED: Okay. Thanks.

5 Q. (By Mr. Melamed) So using -- we've 04:48:49  
6 identified -- or we've discussed -- I'm sorry --  
7 three documents comprising the capabilities tool,  
8 two yesterday and one today.

9 Is that your recollection as well?

10 A. We reviewed three sets of tabular data, 04:48:59  
11 yes.

12 Q. Okay. And I -- I recognized that those  
13 are excerpts, so I'm not asking you to do the  
14 exercise or imagine right now using those excerpts.  
15 I'm asking you to describe how you would go about 04:49:12  
16 doing that -- this exercise.

17 If you wanted to identify all  
18 capabilities that Tinder, the app "Tinder," could  
19 access, how would you do so?

20 MR. SCHWING: Object to form. 04:49:29

21 THE DEPONENT: I would attempt to  
22 [REDACTED] and then I would go to  
23 the capability tool and [REDACTED]  
24 [REDACTED] And then the tool would  
25 view for me the [REDACTED] 04:49:55



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1 [REDACTED] 04:49:59

2 Q. (By Mr. Melamed) So the [REDACTED] is not  
3 one of the fields in Exhibit 429, the Capability  
4 table; is that right?

5 A. This table represents the list of 04:50:14  
6 capabilities that exist in the capability tool at  
7 the time that this table was generated.

8 Q. Okay. So let's walk through -- through  
9 the tool that you would use.

10 So I put up on the screen Exhibit 428, 04:50:55  
11 which we marked yesterday.

12 Which is the capability Grants table.

13 And the [REDACTED] is listed in column C  
14 here. So is -- is this -- once you had determined  
15 the [REDACTED], is this where you would 04:51:13  
16 start in -- in -- started your process of  
17 determining all the capabilities for which Tinder  
18 had been granted access?

19 A. I'm sorry, as a Facebook employee, and I  
20 may have access to the capability tool, and so the 04:51:31  
21 process I would use as a Facebook employee would be  
22 to use the capability tool.

23 Q. So as a non-Facebook employee, plaintiffs  
24 don't have access to the capability tool.

25 So how would you use the documents that 04:51:48

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## HIGHLY CONFIDENTIAL

1 have been produced here, that we discussed to 04:51:49  
2 identify the full set of capabilities that Tinder  
3 had been granted access to?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: If I had the three 04:52:09  
6 documents that we've walked through at my disposal,  
7 [REDACTED] and then I  
8 would [REDACTED]

9 And then my understanding, is that that  
10 would indicate the [REDACTED] 04:52:25  
11 [REDACTED] for which this table contains  
12 data.

13 I would then use the [REDACTED]  
14 and cross-reference that against the table that  
15 we've just spent an hour and a half going through. 04:52:52

16 Q. (By Mr. Melamed) Okay. So just -- I  
17 want to restate this just to make sure I'm clear.  
18 I think I understand, and please correct me if I'm  
19 wrong.

20 So you would start in Exhibit 428 -- once 04:52:59  
21 you had determined [REDACTED] you would start  
22 in Exhibit 428 with the full, not yet so the full  
23 document, you would [REDACTED]  
24 would -- that would identify -- and that's in  
25 column C. Once you had done that, column D would 04:53:18

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1 [REDACTED] at 04:53:23  
2 one time -- [REDACTED], as reflected by the  
3 capabilities tool, and then you would take those  
4 [REDACTED] which  
5 is Exhibit 429 that we were looking at this 04:53:40  
6 morning, and [REDACTED] up in  
7 [REDACTED]; is  
8 that right?

9 A. That's a high-level description of the  
10 process I would follow, yes. 04:53:55

11 Q. Am I missing anything?

12 A. I don't think so.

13 Q. Now what if you wanted to understand all  
14 apps that had access to a specific individual  
15 capability, for example, friends\_religion\_politics. 04:54:12

16 Using the documents we looked at  
17 yesterday and today, how would you go about  
18 determining the list of apps and the time period  
19 during which those apps had access to  
20 friends\_religion\_politics? 04:54:32

21 MR. SCHWING: Object to form.

22 THE DEPONENT: So before I answer the --  
23 the question, I think it's important to note that  
24 just because an app had access to a capability, it  
25 doesn't necessarily mean that it was using the 04:54:47

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1 capability or accessing the data that the 04:54:51  
2 capability involved. That -- that's just what --  
3 was making sure that's -- that's clear and on the  
4 record.

5 My process would be to start with the 04:55:07  
6 prior table we reviewed today, which is the list of  
7 capabilities. [REDACTED]  
8 that I was interested in, and then I would [REDACTED]  
9 [REDACTED]

10 Q. (By Mr. Melamed) Just to be clear, the 04:55:28  
11 prior table you were referencing that we looked at  
12 this morning was Exhibit 429. And then when you're  
13 saying "this table," is this the table presently on  
14 my screen which is Exhibit 428, right?

15 A. That's correct. 04:55:45

16 Q. Okay. So just to talk that through  
17 again, to make sure I understand it.

18 You would go to the full document that  
19 Exhibit 429 reflects an excerpt of, search for  
20 "friends\_religion\_politics," [REDACTED] [REDACTED]  
21 [REDACTED]

22 [REDACTED] And then go to Exhibit 428, [REDACTED]  
23 [REDACTED] in column D, and that would  
24 [REDACTED] -- in column C [REDACTED]  
25 [REDACTED], correct? 04:56:26

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1 MR. SCHWING: Object -- 04:56:32

2 THE DEPONENT: Had access to that --

3 Sorry, Austin.

4 MR. SCHWING: Object to form.

5 Go ahead, please. 04:56:36

6 THE DEPONENT: My understanding of this

7 table is that that would indicate the [REDACTED] that

8 had [REDACTED] at some point in time

9 for which data is available in this -- in this

10 document. 04:56:56

11 Q. (By Mr. Melamed) Okay. And columns in

12 Exhibit 428, columns F, G, H and I, would indicate

13 [REDACTED] that you listed apps had [REDACTED]

14 [REDACTED] is that right?

15 A. Columns G and I would indicate the 04:57:18

16 [REDACTED]. Again, and this -- my

17 understanding is that that would reflect the -- the

18 [REDACTED] when the app [REDACTED] to the

19 capability.

20 But as I said previously, it's important 04:57:37

21 to note the -- that doesn't mean the app was in any

22 way necessarily using the capability, or indeed

23 that the capability returned the information that

24 you might think it would.

25 Q. The document -- go ahead. Sorry. 04:57:56

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## HIGHLY CONFIDENTIAL

1 A. Like, it's very -- I just want to make 04:57:59  
2 this super clear.

3 Q. Okay.

4 A. This -- this reflects the -- the grant  
5 state of a particular capability to an app. There 04:58:08  
6 are other factors which influence the actual  
7 behavior that the app would have experienced as a  
8 result. So it's just important to note.

9 Q. I'm sorry. I interrupted you twice  
10 there. I apologize for that. 04:58:28

11 What document would reflect whether an  
12 app was using the capability; i.e., sending the API  
13 call to Facebook for that capability?

14 A. Well, that's all -- with -- with  
15 correcting there that -- the -- the way the system 04:58:50  
16 works is that -- the [REDACTED].  
17 It makes an API call, and in evaluation of that API  
18 call, Facebook's [REDACTED]  
19 or not a [REDACTED] -- and  
20 if -- and then [REDACTED] [REDACTED]  
[REDACTED] and then the [REDACTED]  
[REDACTED] occurs.

23 Q. So I want to split that inquiry, then,  
24 into two questions.

25 Is the [REDACTED] the source to 04:59:25

## HIGHLY CONFIDENTIAL

1 determine whether an app made the API call for 04:59:28  
2 which it was granted access by the Capabilities  
3 table?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: The [REDACTED] 04:59:48  
6 identifies API calls made by a specific app. By  
7 "method," some of those [REDACTED]

8 [REDACTED] but other -- other methods the -- the

9 [REDACTED]

10 [REDACTED] for example. 05:00:12

11 So it's not -- it's not a reliable way to  
12 determine whether or not an app was accessing data  
13 that was modified by a capability.

14 Q. (By Mr. Melamed) I understand that. I'm  
15 trying to just understand the request from an app. 05:00:33

16 Where would I go to determine whether,  
17 and if so, how many times an app requested -- I'm  
18 sorry -- an app made an API call that -- for which  
19 it was granted the capability of a capabilities  
20 tool? 05:01:02

21 MR. SCHWING: Object to form.

22 THE DEPONENT: My understanding is in the  
23 past, [REDACTED]  
24 whether or not a [REDACTED]

25 [REDACTED], by which I mean, [REDACTED] 05:01:31

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1 [REDACTED] . 05:01:39

2 That information, I recall being  
3 displayed in the -- in the capability tool at  
4 one -- at one time in the past. Although precisely  
5 where that data was stored today, again the tool 05:01:57  
6 has evolved over time.

7 But I recall that information being  
8 logged at one point in the past.

9 Q. (By Mr. Melamed) Do you know when that  
10 information was logged in the capability tool -- or 05:02:09  
11 let me rephrase that.

12 Do you know when the capabilities tool  
13 stopped logging that information?

14 A. So it's important to say here that the  
15 capability tool doesn't necessarily log that 05:02:31  
16 information. That information is [REDACTED]

17 [REDACTED] I recall that that  
18 information was displayed in the capability tool  
19 starting in -- in -- in 2014 or so.

20 I -- I don't -- I -- I don't know if that 05:02:54  
21 information is still displayed in the capability  
22 tool, and I would imagine that it is still being  
23 logged however.

24 Q. Do you know where the information is  
25 being logged? 05:03:09

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1 around 2014. 05:04:55

2 Q. Do you recall the point at which the  
3 capabilities tool no [REDACTED]

4 [REDACTED]? I'm sorry, [REDACTED]

5 [REDACTED] 05:05:14

6 A. So my personal involvement with the  
7 capability tool ended in around 2015. And so  
8 that's -- the period from 2013 or late 20- -- 2014  
9 to '15 is -- is what I'm relying on here for my  
10 testimony, so I'm using the phrase "my  
11 recollection." 05:05:36

12 As I -- my understanding is that -- it's  
13 [REDACTED] -- is  
14 [REDACTED] But I -- I can't confirm which  
15 table, or whether or not or how that information is  
16 represented in the capability tool today. 05:05:59

17 Q. When you left -- when you stopped using  
18 the capabilities tool in your personal capacity as  
19 a Facebook employee, was the information regarding  
20 whether an [REDACTED] 05:06:21  
21 [REDACTED] still reflected in the capabilities tool?

22 A. My -- my recollection is that that  
23 information was -- [REDACTED] in the  
24 capabilities tool. And I'm just being accurate on  
25 the word here. My understanding is that it was 05:06:39

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## HIGHLY CONFIDENTIAL

1 [REDACTED] 05:06:41

2 Q. What does it mean to -- to say a

3 "[REDACTED]"

4 A. My understanding of -- of how capability

5 is implemented in the code base is that there is 05:06:56

6 a -- what's called a [REDACTED], which is

7 a -- a [REDACTED] and a

8 capability as to whether or not the app [REDACTED]

9 [REDACTED], and that's called a [REDACTED]

10 [REDACTED] 05:07:18

11 MR. MELAMED: We can go off the record.

12 THE VIDEOGRAPHER: Okay. We're off the

13 record it's 5:07 p.m.

14 (Recess taken.)

15 THE VIDEOGRAPHER: We are back on the 05:07:56

16 record. It's 5:21 p.m.

17 (Exhibit 430 was marked for

18 identification by the court reporter and is

19 attached hereto.)

20 Q. (By Mr. Melamed) Mr. Cross, I've just 05:21:18

21 marked Exhibit 430. It is a message discussion

22 between Steven Elia, Scott Mellon, Eddie O'Neil,

23 Drew Lackman, Cathy Huang, Tatyana --

24 SPECIAL MASTER GARRIE: Guys, I'm ready

25 to roll whenever you guys are. 05:21:34

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## HIGHLY CONFIDENTIAL

1 MR. SCHWING: We're -- we're underway, 05:21:37  
2 Special Master Garrie. I don't know if you can  
3 hear us. Yeah, we've started.  
4 SPECIAL MASTER GARRIE: Counsel Melamed.  
5 MR. MELAMED: Yup, we're going. Can you 05:21:49  
6 hear?  
7 SPECIAL MASTER GARRIE: Am I talking to  
8 myself.  
9 THE COURT REPORTER: Should we go off the  
10 record? 05:22:01  
11 MR. MELAMED: Yeah, let's go off the  
12 record.  
13 THE VIDEOGRAPHER: We're off the record.  
14 (Recess taken.)  
15 THE VIDEOGRAPHER: We're back on the 05:22:16  
16 record. It's 5:22 p.m.  
17 MR. MELAMED: So I've just marked  
18 Exhibit 430. It's a message summary. The date on  
19 the document is June 14th, 2018. It includes  
20 Cathy Huang, Steve Elia, Scott Mellon, 05:22:39  
21 Eddie O'Neil, Drew Lackman, Cathy Huang -- sorry,  
22 if I mentioned her twice. Tatyana Poturnak and  
23 Konstantinos Papamiltiadis. And it runs from  
24 Bates number FB-CA-MDL-02898663 through -8668.  
25 Q. (By Mr. Melamed) This message summary 05:23:10

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1 runs chronologically, so from top to bottom. 05:23:12

2 Have you had a chance to look at this  
3 document, Mr. Cross?

4 A. I saw this document in preparation for  
5 today, but I would appreciate a few minutes just 05:23:31  
6 to -- to refamiliarize myself with it, if that's  
7 okay.

8 Q. Okay. That's no problem. I'm going to  
9 direct you to a very specific part of it.

10 MR. SCHWING: You want to tell him, Matt, 05:23:49  
11 in advance so as he's reading he can kind of focus  
12 on that. It's up to you.

13 MR. MELAMED: Thank you, Austin.

14 Q. (By Mr. Melamed) I am going to direct  
15 your attention to the very bottom of the page 05:23:57  
16 ending -8667, to the second to last page.

17 A. Okay. Cool. I appreciate it, Counsel.  
18 Thank you.

19 Q. Thank you.

20 So it seems that in this message 05:24:55  
21 Mr. Papamiltiadis is trying to pull together some  
22 information, correct?

23 A. Yeah, I think KP is working with his team  
24 to pull some information, yes.

25 Q. Okay. And do you know what information 05:25:07

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1 he's trying to pull together? 05:25:08

2 A. I think we understand by -- by reading  
3 the -- reading the thread to -- to be able to  
4 answer that question.

5 It doesn't -- it doesn't say here 05:25:58  
6 precisely what information they're -- they're --  
7 they're actually -- or what -- what -- what  
8 question they're attempting to answer. That's --  
9 that's not in this document, I don't think.

10 Q. Can you look at the attachments line on 05:26:09  
11 the very first page. You'll see that there's an  
12 attachment here titled "All apps with access to  
13 friends\_\*data 06.14.2018 v2."

14 Does that inform the information -- does  
15 that inform you about the information that 05:26:30  
16 Mr. Papamiltiadis and his team were attempting to  
17 pull together.

18 MR. SCHWING: Object to form.

19 THE DEPONENT: It suggests that -- sorry,  
20 Austin. 05:26:41

21 MR. SCHWING: Object to form.

22 Go ahead and answer, if you can.

23 THE DEPONENT: It suggests they may be  
24 trying to identify apps with -- with access to  
25 friend -- friend data as -- but that -- that could 05:26:49

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1 be just part of what they're -- they're looking 05:26:54  
2 for, for example. But that -- that -- that's  
3 indicative of maybe what they were looking for.

4 Q. (By Mr. Melamed) All right. If you go  
5 down to the bottom of the document -8667. I'm 05:27:07  
6 sorry, the bottom of the page -8667.

7 A. Uh-huh.

8 Q. And you see Mr. Papamiltiadis has a link  
9 to a Quip?

10 A. I see it. 05:27:25

11 Q. And in that, he appears to describe the  
12 Quip, correct? He says three tabs. "1. device and  
13 3p apps with access to friends data. 2. first  
14 party apps and apps with no admins or info. 3. 3p  
15 apps with short terms extensions." 05:27:43

16 A. I see that in the document.

17 Q. Okay. Do you understand him to be  
18 referencing that Quip that those -- the description  
19 of the three tabs. I'm sorry. Make it clearer.

20 Do you understand Mr. Papamiltiadis' 05:27:56  
21 description of the three tabs generally referring  
22 it to the document "fb.quip url" above that?

23 MR. SCHWING: Object to form.

24 THE DEPONENT: It's likely he was  
25 referring to that, but I can't be 100 percent. 05:28:14

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1 Q. (By Mr. Melamed) In re- -- prep- -- in 05:28:16  
2 preparing for today's testimony, did you review the  
3 document at this Quip?

4 A. Yes, I had a -- I think I attempted to  
5 access that document, yes. 05:28:38

6 Q. Okay. Were you able to access that  
7 document?

8 A. Yeah, I think I was able to access that  
9 document.

10 Q. And what was that document? What 05:28:47  
11 information is contained in that document?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: My recollection is that  
14 that's a -- a list of -- of -- of apps and -- and  
15 some information about them. 05:29:04

16 Q. (By Mr. Melamed) What information about  
17 them is reflected in that document?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: I don't -- I don't recall  
20 specifically. But there's different information on 05:29:18  
21 the different tabs. Sorry, I don't recall  
22 precisely the information in that document.

23 Q. (By Mr. Melamed) Did the information in  
24 that document reflect Mr. Papamiltiadis'  
25 description of the three tabs? 05:29:34

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1 MR. SCHWING: Object to form. 05:29:40

2 THE DEPONENT: I -- I think I recall  
3 seeing three tabs in -- in that document. But,  
4 again, I can't be completely sure.

5 Q. (By Mr. Melamed) Do you know -- sorry. 05:29:58

6 You said you pulled -- you went to  
7 that -- to access that document via Quip; is that  
8 right?

9 A. Yes. I -- I -- I accessed that document  
10 via Quip. 05:30:18

11 (Exhibit 431 was marked for  
12 identification by the court reporter and is  
13 attached hereto.)

14 MR. MELAMED: I just introduced what's  
15 been marked as Exhibit 3 -- I'm sorry, 431. 05:31:00  
16 Exhibit 431 is a -- is a spreadsheet FB-CA-MDL --

17 SPECIAL MASTER GARRIE: Where do I  
18 find -- where -- I can't find Exhibit 431. I see  
19 Exhibit 428.

20 MR. MELAMED: I think you're in a 05:31:22  
21 different exhibit folder. There is deposition of  
22 Simon Cross 30(b)(6).

23 SPECIAL MASTER GARRIE: I found it. I  
24 found it. I found it. I was looking at it and I  
25 clicked a different one. There's six folder forms. 05:31:31

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1 My apologies for interrupting. 05:31:33

2 MR. MELAMED: So Exhibit 431 is a  
3 document with the Bates FB-CA-MDL-02898670. And it  
4 was attached to the Exhibit 430.

5 Q. (By Mr. Melamed) Do you know if this is 05:31:56  
6 the document you referred -- you reviewed at the  
7 Quip URL that is identified in Exhibit 430 at the  
8 bottom of page -8667?

9 A. No, my understanding is that this is a --  
10 a different document. 05:32:18

11 Q. So this was a -- a document attached to  
12 his message string, but is not the document being  
13 referred to in that string -- or I'm sorry, in that  
14 Quip URL; is that right?

15 A. My recollection is the document in the 05:32:32  
16 Quip is -- is different to this.

17 Q. For instance, this Excel spreadsheet does  
18 not have three tabs, right?

19 A. This Excel spreadsheet just has one tab.

20 Q. Did the document you reviewed have three 05:32:47  
21 tabs?

22 A. Again, I think my recollection is that it  
23 had three tabs.

24 MR. MELAMED: So Counsel, I'm going to  
25 ask that you produce the document at the Quip that 05:33:03

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1 Mr. Cross accessed -- I don't -- or identify it, if 05:33:06  
2 it has been produced. I'll state that I don't  
3 think that it has been. It's possible I'm  
4 incorrect but we -- we did search.

5 MR. SCHWING: Okay. I mean, I -- I 05:33:15  
6 don't -- this is the first time this has been  
7 raised, Mr. Melamed. You identified these  
8 documents, you know, a while ago. We're happy to  
9 communicate with you about that. I mean, I would  
10 have hoped that we could have done this before the 05:33:28  
11 deposition, actually. But happy to communicate  
12 with you about that.

13 MR. MELAMED: All right. Thank you for  
14 that offer. There are thousands, and probably tens  
15 of thousands of documents that have been produced 05:33:40  
16 by Facebook with Quips or --

17 SPECIAL MASTER GARRIE: All right.  
18 Timeout.

19 MR. MELAMED: -- and have not been  
20 produced. And we've addressed that before. 05:33:49

21 SPECIAL MASTER GARRIE: We're going to  
22 take a timeout here. And we're going to answer my  
23 question instead, which is, are there anymore  
24 documents with attachments or exhibits that you're  
25 not sure you have from Facebook that are Quip like 05:34:03

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1 this? 05:34:08

2 MR. SCHWING: For today's deposition you  
3 mean?

4 SPECIAL MASTER GARRIE: For today's  
5 deposition. 05:34:12

6 MR. MELAMED: I -- that's a good  
7 question. I don't think so.

8 SPECIAL MASTER GARRIE: Okay. I just  
9 want to make sure we get today's deposition done.  
10 So in the interest of time, I was going to suggest 05:34:20  
11 we take a five-minute break if there were and talk  
12 with Counsel Schwing and see if we can quickly  
13 rectify that.

14 MR. MELAMED: If Facebook can produce  
15 that document in the next little bit, that would be 05:34:32  
16 great. We can try and ask the questions that I had  
17 hoped to ask about.

18 SPECIAL MASTER GARRIE: Well, when we  
19 take our next break and Counsel Loeser goes, maybe  
20 if there's time at the end we give them a couple 05:34:44  
21 hours, they can find it, great. If not, I'll leave  
22 it to the parties to sort out.

23 Back to you Counsel Melamed.

24 MR. MELAMED: Thank you.  
25 05:34:52

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1       ///// 05:34:52

2               (Exhibit 432 was marked for  
3       identification by the court reporter and is  
4       attached hereto.)

5               MR. MELAMED: I just introduced what's 05:35:14  
6       been marked as Exhibit 432. Exhibit 432 is an  
7       Excel spreadsheet. FB-CA-MDL-02674226.

8               The metadata associated with the document  
9       indicates that it was created on August 15th, 2018.

10       And the name of it is "20180815\_nana" N-A-N-A 05:35:42  
11       "ad hoc request\_friends permission metadata.xlsx."

12              Q. (By Mr. Melamed) While you're reviewing  
13       that, I'm downloading it so I can share my screen  
14       and we can look at it more effectively.

15              Can you see my screen, Mr. Cross? 05:36:25

16              A. I can see your screen.

17              Q. Okay. Did you review this document in  
18       preparation for today's testimony?

19              A. I have not seen this document before.

20              Q. Do you know -- let's -- let's go through 05:36:41  
21       column by column and see if you can identify the  
22       information being reflected in this document.

23              Column A is titled "App ID" and it has a  
24       number.

25              Do you understand what's in the 05:36:58

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1 information in column A? 05:37:00

2 A. My understanding is that would refer to  
3 the Facebook app ID of the given application.

4 Q. Okay. And column B is the "App Name"  
5 that is associated with that App ID; is that right? 05:37:13

6 A. That's right.

7 Q. Column C indicates "Number of Friends  
8 Permissions."

9 Do you know what that means?

10 A. No, I don't know what that means. It -- 05:37:27  
11 it -- that could mean a number of different things.  
12 So no, given I haven't reviewed this document or --  
13 or how it was -- how it was created. I -- I can't  
14 for certain explain what column C represents.

15 Q. In column D has the indicator "less than 05:37:57  
16 100." [as read]

17 Do you know what that means?

18 A. Again, without -- there's no additional  
19 context here, and I haven't seen this document  
20 before. So it's hard for me to explain what I 05:38:12  
21 think that -- that column means.

22 Q. Is the same true for columns E through H?

23 A. That would be correct.

24 MR. SCHWING: Mr. Melamed, I don't see  
25 this on the list of exhibits that you -- you 05:38:25

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1 identified for us in advance of the deposition with 05:38:28  
2 respect to topics 2 and 8.

3 MR. MELAMED: I'm happy to look at that  
4 at a break. I believe it was identified, but we  
5 can -- we can check that. 05:38:42

6 MR. SCHWING: Yeah. Okay. I mean, look  
7 you -- you can go ahead and ask the questions. I  
8 just wanted to state for the record I'm looking at  
9 a June 3rd email, I don't -- don't see that on here  
10 in terms of the documents you indicated the witness 05:38:52  
11 should take a look at for today's deposition. But  
12 happy to discuss that with you.

13 Q. (By Mr. Melamed) Does the title of the  
14 document which I -- the metadata states is  
15 friend -- is again, "20180815\_nonad hoc 05:39:10  
16 request\_friends permission metadata.xls -- xlsx,"  
17 indicate anything to you about what this document  
18 is about?

19 A. Could you read that more slowly for me,  
20 please. It's a long -- it's a long string. 05:39:29

21 Q. Of course.

22 So the first part of it is 20180815. And  
23 I will tell you that that appears to reflect the  
24 date created metadata which is August 15th, 2018.  
25 And there's an underscore that's Nana, N-A-N-A, 05:39:47

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1 ad hoc request\_friends permission metadata. 05:39:53

2 Does that help you understand the  
3 information that's being reflected in this  
4 document?

5 A. So thank you for reading it more slowly. 05:40:14

6 I mean, it -- it suggests something to do with  
7 friend permissions and I -- I see the column here,  
8 the column C "Number of Friend Permissions," but it  
9 doesn't have much more context than that.

10 Q. Are you familiar with the app "This is 05:40:36

11 Your Digital Life"?

12 A. I have heard of the -- of the app -- This  
13 is Your Digital Life.

14 Q. And what is your understanding -- in what  
15 context have you heard of the app, This is Your 05:40:49  
16 Digital Life?

17 A. I've heard of that in the context of  
18 Cambridge Analytica.

19 Q. If you go to line 28,122 in this  
20 document, do you see that column B "App Name" 05:41:08  
21 reflects "thisisyourdigitallife"?

22 A. I see that on the screen.

23 Q. And do you see that the "Number of  
24 Friends Permissions" in this document associated  
25 with This is Your Digital Life is five? 05:41:25

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1           A. Again, I see that in the -- in the                                 05:41:31  
2 document.

3 Q. Do you know how many times Facebook users  
4 downloaded This is Your Digital Life? Let me  
5 restate that. 05:41:44

```
6         Do you know how many Facebook users
7 signed in to This is Your Digital Life?
```

8 MR. SCHWING: Object to scope. Object to  
9 the form of the question.

10 And, again, I think this was not an 05:41:54  
11 exhibit that was identified in June 3rd, email.

12 THE DEPONENT: I'm not aware of the  
13 number of people that have -- what was your phrase,  
14 sorry.

15 Q. (By Mr. Melamed) Number of Facebook 05:42:13  
16 users who logged in to This is Your Digital Life?

17           A.     I'm -- I'm not aware of the number of  
18     Facebook users who logged in to This is Your  
19     Digital Life.

20 Q. I'll -- I'll represent to you that 05:42:23  
21 Facebook publicly reported approximately 270,000  
22 Facebook users logged in to This is Your Digital  
23 Life.

24	Does that sound accurate to you? Do you	
25	have any reason to doubt that?	05:42:39

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1 MR. SCHWING: Object to the form. It's 05:42:40  
2 outside the scope of the deposition.

3 THE DEPONENT: I have no reason to doubt  
4 what you're saying. But, again, I -- I don't  
5 recall those numbers. 05:42:53

6 Q. (By Mr. Melamed) Okay. I'm just trying  
7 to establish background that would help you  
8 potentially testify regarding the tracking  
9 information in this. So if that's not helpful,  
10 that's okay. And we can move on. 05:43:14

11 (Exhibit 433 was marked for  
12 identification by the court reporter and is  
13 attached hereto.)

14 MR. MELAMED: I just identified what's  
15 been marked as Exhibit 433. It is an email string 05:44:43  
16 that's Bates No. FB-CA-MDL-01952426 to -52427. The  
17 last in time is from Dan Rose to Ime Archibong and  
18 Francisco Varela dated June 22nd, 2018. The  
19 subject "Re: V1 extensions."

20 Q. (By Mr. Melamed) Did you review this 05:45:26  
21 email string in preparation for today's testimony?

22 A. Yes, I looked at this document in  
23 preparation for today.

24 (Discussion off the stenographic record.)

25 Q. (By Mr. Melamed) Okay. Is this -- I'm 05:46:21

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1 sharing my screen now, and I'm on the page ending 05:46:25  
2 -427. The first in time email is from Dan Rose to  
3 Ime Archibong and Francisco Varela saying -- and  
4 the subject is "Vl extensions" saying [REDACTED]  
[REDACTED]  
[REDACTED]  
7 And Mr. Varela responds [REDACTED]  
[REDACTED] for 'source of truth'  
9 on what apps had [REDACTED] with  
10 [REDACTED] after 05:47:00  
11 May 2015."  
12 What does "source of truth" mean in this  
13 context.  
14 MR. SCHWING: Object to form.  
15 THE DEPONENT: Sorry, this is a document 05:47:19  
16 written by Mr. Varela several years ago and source  
17 of truth, might mean different things in different  
18 context. So I can't give a canonical definition of  
19 that. We would have to ask Mr. Varela.  
20 My understanding is that this is a group 05:47:39  
21 of people pulling together to try and get a  
22 complete understanding of which apps had access to  
23 API.  
24 Q. (By Mr. Melamed) Right.  
25 So your testimony today in part concerns 05:48:02

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1 tracking information that Facebook provided to 05:48:08  
2 third parties, right, or you understand that to be  
3 part of the testimony you're offering, correct?

4 A. If I remember the -- the topics  
5 correctly, then yes, I think that's fine. 05:48:28

6 Q. So I'm looking at this document and  
7 asking questions about it to try and determine how  
8 Facebook tracked at this -- the point in time when  
9 this document was created [REDACTED]

10 [REDACTED] with [REDACTED] 05:48:46  
11 [REDACTED] after 2015.

12 So Mr. Varela -- and how do you pronounce  
13 his last name so I get it correct.

14 A. I think it's "Varela."

15 Q. Thank you. 05:49:10

16 Mr. Varela indicates that Eddie O'Neil  
17 pulled data the week before this email is written  
18 to try to pull together a source of truth on what  
19 apps had [REDACTED] with [REDACTED]

20 [REDACTED] after May 2015. 05:49:29

21 Do you see that?

22 MR. SCHWING: Object to form.

23 THE DEPONENT: I see that.

24 Q. (By Mr. Melamed) What tools on or around

25 June 2018 did Facebook use to track which apps had 05:49:55

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1 [REDACTED] after May 2015? 05:50:00

2 A. So -- so my understanding is that there

3 were -- in terms of [REDACTED]

4 to what we've talked about the -- [REDACTED]

5 [REDACTED] and so on, and then my understanding in 05:50:36

6 order to pull this together one of the sources

7 would have been the capability tool.

8 Another source would have been the

9 gatekeeper tool. And my understanding is that's --

10 those are two of the tools. 05:50:55

11 I think the third one would have been

12 potentially included is a tool called site bar.

13 Q. What is the gatekeeper tool?

14 A. The gatekeeper tool is a tool inside

15 Facebook which is used to [REDACTED] 05:51:20

16 [REDACTED]

17 Q. How does the gatekeeper tool differ from

18 the capabilities tool?

19 A. Gatekeeper and capabilities are different

20 tools. 05:51:40

21 Q. So what is -- what does -- can you

22 explain the differences between them, please.

23 MR. SCHWING: Object to form.

24 THE DEPONENT: The capability tool is --

25 is [REDACTED] 05:51:54

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1 [REDACTED] 05:52:01

2 The capability tool is used -- sorry, the  
3 gatekeeper tool is used at Meta to gain [REDACTED]

4 [REDACTED]

5 [REDACTED] 05:52:18

6 Q. (By Mr. Melamed) Does the gatekeeper  
7 tool include information about apps access to APIs?

8 A. To -- does it today, the capability -- my  
9 understanding is the gatekeeper tool [REDACTED]

10 [REDACTED] 05:52:55

11 [REDACTED]

12 Q. Did the gatekeeper tool have information  
13 regarding apps access to APIs as of June 2018?

14 A. My understanding is that there [REDACTED]

15 [REDACTED] 05:53:21

16 [REDACTED] gatekeeper tool in 2018.

17 Q. Did those features include access to  
18 Graph version 1.0 API?

19 A. Exactly what was gated by which tool  
20 has -- has -- has changed over time. And so I 05:53:49  
21 can't be exactly certain of exactly what was being  
22 gated by that -- by the gatekeeper tool in -- in,  
23 at the time you're referencing.

24 So hard for -- hard for me to give a  
25 precise answer on the fly. 05:54:07

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1 Q. So the context of what I'm asking is, I'm 05:54:09  
2 trying to determine -- you had mentioned that  
3 Mr. O'Neil had likely used the capabilities tool  
4 and gatekeeper tool and something else we haven't  
5 yet discussed called site bar, to identify the apps 05:54:19  
6 as of June 2018 that had [REDACTED]  
7 [REDACTED] with [REDACTED]  
8 after May 2015.

9 Did I understand -- am I correctly  
10 summarizing what you said? 05:54:45

11 A. My understanding is that those were the  
12 tools that this team likely were -- were looking  
13 into, yes.

14 Q. All right. Does Facebook still have the  
15 information that was in the gatekeeper tool as of 05:55:06  
16 June 2018?

17 MR. SCHWING: Object to form. Outside  
18 the scope.

19 THE DEPONENT: My understanding is that  
20 there -- there was an effort undertaken to -- 05:55:20  
21 sorry. I -- I'm not familiar with the -- the --  
22 the details of the -- the logging which is kept  
23 about the gatekeeper tool and exactly what is --  
24 what is still stored today.

25 Q. (By Mr. Melamed) Does the gatekeeper 05:55:42

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1 tool still exist today at Facebook? 05:55:43

2 A. The gatekeepers tool still exists at  
3 Facebook.

4 Q. And it contains information about apps  
5 that are on Facebook's platform? 05:55:55

6 A. My understanding is that the capabilities  
7 tool is -- is the source of truth [REDACTED]

8 [REDACTED] and the apps [REDACTED]

9 [REDACTED]

10 Q. What is the difference between a private 05:56:23  
11 API and a capability?

12 A. A capability refers to a -- a specific  
13 mechanism of -- of gating behavior or change --  
14 sorry. Let me start again.

15 A capability refers to a specific 05:56:40  
16 mechanism for modifying platform API behavior for  
17 specific apps.

18 The private app, as a general term would  
19 refer to a -- a mechanism of accessing information  
20 which is not available, not generally available. 05:57:00

21 Q. Are all capabilities subsumed within the  
22 definition of private APIs?

23 MR. SCHWING: Object to form.

24 THE DEPONENT: Sorry, help -- help me  
25 understand. Let me get this the right way around 05:57:18

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1       that's -- yes, can you -- can you clarify your                     05:57:21

2       question.

3 Q. (By Mr. Melamed) I'm just trying to  
4 understand what clearly the -- the extent to which  
5 something that is a capability is also a private 05:57:30  
6 API and when they are not. And I thought I  
7 understood you to say that the capabilities are a  
8 more specific type of dating mechanism than private  
9 APIs, but I may have misunderstood what you said.

```
10         So I'm just trying to understand where -- 05:57:51
11     if they are the same, if -- or if some capabilities
12     are also private APIs and where they are different,
13     what is the basis for the difference?
```

14           A.     So the capabilities are a way of  
15       modifying API behavior in some way for specific                      05:58:07  
16       apps. The precise behaviors which a capability  
17       modifies are quite wide ranging. Sorry -- quite --  
18       quite wide ranging. It's -- it -- it would be  
19       reasonable to frame that if a private API exists or  
20       -- or then it would be gated by a capability today.                  05:58:39

21 Q. All private APIs presently are  
22 capabilities.

23 Is that an accurate statement?

24                   A.     No, that's not --

25	MR. SCHWING: Objection.	05:58:56
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1 THE DEPONENT: Sorry, Austin. 05:58:57

2 MR. SCHWING: Object to form.

3 Go ahead and answer, if you can,

4 Mr. Cross.

5 Q. (By Mr. Melamed) Yeah, I thought that's 05:59:01

6 what you just testified. I'm really not trying to

7 trick you. I'm just trying to get an understanding

8 of the relationship between these two -- between

9 private APIs and capability?

10 A. So a capability modifies the API behavior 05:59:14

11 in some way. One of the things that a capability

12 could do is -- is grant an app access to additional

13 information, but it could also do many other

14 things.

15 So there's -- there's not a direct 05:59:38

16 relationship between capabilities which is a

17 specific mechanism of -- of controlling access or

18 controlling API behavior changes and -- and the --

19 the phrase private API which -- which indeed might

20 mean different things in different context. 05:59:54

21 Q. Am I right to recall that -- that your

22 testimony the gatekeeper tool [REDACTED]

[REDACTED]

24 A. I'm not sure that's -- I'm not sure

25 that's completely accurate, no. The gatekeeper 06:00:21

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1 tool is a -- a [REDACTED] 06:00:25

2 [REDACTED] In that sense it's similar to  
3 the capability tool.

4 My understanding is that -- there were  
5 some gatekeepers, as they're called, which -- the 06:00:43  
6 way they worked [REDACTED]  
7 [REDACTED]

8 Q. What type of additional information are  
9 you talking about?

10 A. It depends on the specific gatekeeper and 06:01:07  
11 the exact functionality that that gatekeeper was  
12 designed to modify.

13 Q. Would gatekeepers have ever been designed  
14 to modify access to user information?

15 A. Sorry, that's -- that's a very broad 06:01:30  
16 question, as in gatekeeper is widely used at  
17 Facebook for a number of preferences.

18 Can you be more specific in the context  
19 you mean?

20 Q. I'm just trying to understand what 06:01:40  
21 information is reflected in the gatekeeper tool.

22 A. So the information reflected in the -- in  
23 the gatekeeper tool would be a gatekeeper which is  
24 a -- a specific -- which is a specific thing.

25 And -- and then the gatekeeper tool [REDACTED] 06:02:08

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## HIGHLY CONFIDENTIAL

1 which entities that [REDACTED]. 06:02:17

2 Q. Did gatekeeper ever identify entities  
3 that passed or failed -- let me withdraw and  
4 restate it. I'm trying to use your language. I'm  
5 not quite sure I understand it. 06:02:53

6 Did the gatekeeper tool ever identify  
7 apps that [REDACTED]  
8 [REDACTED]?

9 MR. SCHWING: Object to form.

10 THE DEPONENT: So my understanding is 06:03:33  
11 that there were at times or was at -- at one time a  
12 gatekeeper [REDACTED]

13 [REDACTED] And -- and that was a -- one of the  
14 things in -- in gatekeeper.

15 Q. (By Mr. Melamed) Is the information 06:04:00  
16 about which apps were [REDACTED]  
17 [REDACTED] -- [REDACTED]  
18 still present in the gatekeeper tool?

19 A. My understanding is -- the effort was  
20 undertaken to migrate that information from the 06:04:22  
21 gatekeeper tool into the capability tool. And so  
22 my understanding is the capability tool is -- is  
23 reflective of that information.

24 Q. Is -- when was the gatekeeper tool last  
25 used to reflect information about which apps were 06:04:39

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1 [REDACTED] 06:04:46

2 [REDACTED]

3 MR. SCHWING: Object to form.

4 THE DEPONENT: And so the -- the

5 migrate -- a range of migrations happened from -- 06:05:03

6 the gatekeeping tool into the -- into the

7 capability tool. That -- that happened over a

8 period of time. I think there were some migrations

9 that took place in 2014. And some more migrations

10 that took place in 2018 and 2019. 06:05:25

11 Q. (By Mr. Melamed) Is it your

12 understanding that the capabilities tool has

13 entries reflecting the apps that [REDACTED]

14 [REDACTED]

15 A. My understanding is that the capability 06:05:54

16 tool is reflective of Facebook's best understanding

17 of -- of API gating mechanisms.

18 Q. When we discussed the capability tool, it

19 was on an individual API basis and not a, for

20 instance, Graph API basis, do you -- is that 06:06:16

21 accurate?

22 MR. SCHWING: Object to form.

23 THE DEPONENT: No, that's -- that's not

24 accurate. What we discussed was capabilities in

25 the capability tool. 06:06:29

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1 Q. (By Mr. Melamed) Is there a capability 06:06:35  
2 in the capability tool reflective of an apps  
3 [REDACTED] ?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: My understanding is that 06:06:54  
6 there are capabilities [REDACTED]  
7 [REDACTED] .

8 Q. (By Mr. Melamed) Right.

9 So let's -- let's use an example. There  
10 were a series of APIs deprecated from Graph 1.0, 06:07:14  
11 when Graph version 2.0 was introduced, right?

12 A. There are a number of changes between API  
13 version 1 and API version 2.

14 Q. And some of those changes involved  
15 deprecations of certain APIs, right, such as 06:07:37  
16 friends permissions and read stream?

17 A. Let's -- let's be clear the friends  
18 permissions are not APIs. They're -- they're  
19 permissions. And so these -- these -- these  
20 details are -- I think are important in the 06:07:54  
21 context.

22 Q. So the deprecations can return the  
23 friends\_\* APIs, correct?

24 A. No, the -- the friends\_\* refers to -- to  
25 a set of permissions not -- not APIs. 06:08:13

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1 Q. Can you identify one API associated with 06:08:17  
2 the friends\_\*permission?

3 A. So an API to get the users likes, for  
4 example, is -- is an API and what's returned by the  
5 API is -- is controlled by permissions. 06:08:42

6 Q. Is the read stream an API?

7 A. Do you mean -- no. Read\_stream is what  
8 you're referring to is read\_stream that -- that --  
9 in that form it refers to specifically a  
10 permission, I understand. 06:09:06

11 Q. When Facebook deprecated Graph 1.0 API,  
12 that deprecation included a series of APIs within  
13 that, right? So Graph 1.0 was kind of the big  
14 picture and it involved a collection of APIs, some  
15 of which were deprecated when it deprecated the 1.0 06:09:41  
16 and went to 2.0; is that correct?

17 MR. SCHWING: Object to the form.

18 THE DEPONENT: There are a large number  
19 of changes between, you know, several changes  
20 between version 1 and version 2. There were some 06:10:00  
21 permissions which were no longer available in  
22 version 1 -- sorry in version 2. There were some  
23 changes to the underlying API methods as well, if I  
24 recall. I don't remember the detail.

25 Q. (By Mr. Melamed) Okay. So let's talk 06:10:20

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1 about the read stream permission. 06:10:22

2 Do you recall that the read stream  
3 permission was deprecated when Graph version 2.0  
4 was introduced?

5 A. The read stream permission was a -- I 06:10:34  
6 think included in API version 2. So it -- it  
7 wasn't deprecated in API version 2.0 as I said.

8 Q. What about "friends\_religion\_politics,"  
9 is that something you recall being deprecated in  
10 version 2.0? 06:10:55

11 A. My understanding is that the -- the  
12 version 2.0 behavior for standard apps did not  
13 include different permissions, which that one was.

14 Q. Okay. And so the capabilities role  
15 breaks out by [REDACTED] which 06:11:18  
16 [REDACTED] -- [REDACTED]  
17 on those [REDACTED] is that right?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: I don't recall the  
20 capabilities tool [REDACTED] 06:11:39  
21 [REDACTED] that apps  
22 would necessarily [REDACTED].

23 Q. (By Mr. Melamed) We -- we talked about a  
24 hypothetical where I asked what we would do using  
25 the documents Facebook had produced reflecting the 06:12:01

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1 capability tool to identify which apps have a -- 06:12:02  
2 were granted capabilities with respect to  
3 friends\_religion\_politics.

4 Do you remember that?

5 A. I don't think we were talking about 06:12:18  
6 the -- friends\_religion\_politics in relation to the  
7 -- the Capability tables earlier.

8 Q. Does the capability tool reflect whether

9 [REDACTED]  
10 [REDACTED]? 06:12:42

11 MR. SCHWING: Object to form.

12 THE DEPONENT: In determining whether or  
13 not an -- an app had -- first of all, there's a  
14 number of features in API version 1. In these  
15 versions -- these APIs are not distinct things. 06:13:12  
16 They're the same Graph API with behaviors applied.

17 My understanding is that there is a  
18 capability [REDACTED]

19 [REDACTED] and precise behavior of that capability  
20 changed over time. 06:13:48

21 Q. (By Mr. Melamed) Is your understanding  
22 of "that capability" that it [REDACTED]

23 [REDACTED] Do you remember --  
24 was -- provided -- provided by capability?

25 A. Which APIs or which API versions, my 06:14:12

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1 understanding is [REDACTED] 06:14:16  
2 to via that capability depended on a number of  
3 factors, including the -- the time in which that  
4 was the case.

5 Q. I don't think I'm -- my question is clear 06:14:38  
6 or I'm asking it correctly.

7 Is -- does the capability tool -- putting  
8 aside the reason that an app would have been  
9 prevented -- [REDACTED]

10 [REDACTED] 06:14:58

11 Where did Facebook identify the  
12 developers that could continue to access Graph 1.0  
13 API after it was deprecated?

14 MR. SCHWING: Object to form.

15 THE DEPONENT: So the [REDACTED] as 06:15:27  
16 I understand it, is -- is -- contains one way of  
17 identifying that.

18 And the [REDACTED] at the time, was  
19 another mechanism in which some apps were included.

20 And so my understanding is -- is now that 06:15:47  
21 all of the information is contained in the -- in  
22 the [REDACTED]

23 Q. (By Mr. Melamed) Is it your  
24 understanding that all of the historical  
25 information from the gatekeeper tool is now in the 06:15:58

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1 capabilities tool? 06:16:01

2 A. My understanding is that informa- --

3 sorry, Austin.

4 MR. SCHWING: Object -- object to form.

5 Go ahead. 06:16:09

6 THE DEPONENT: My understanding is that

7 the information in the capability tool has been

8 backfilled to the best of Facebook's ability.

9 Q. (By Mr. Melamed) Does -- what do you  
10 mean "the best of Facebook's ability"? 06:16:28

11 A. My understanding is the -- when the

12 [REDACTED] that involved [REDACTED]

13 [REDACTED], that

14 information about those [REDACTED]

15 the capability tool. 06:16:53

16 Q. Does the gatekeeper tool still exist at

17 Facebook?

18 A. Yes, the gatekeeper tool still exists at

19 Facebook.

20 Q. What is it presently used for? 06:17:12

21 MR. SCHWING: Object to form.

22 THE DEPONENT: The gatekeeper tool is a

23 common way that teams at Facebook [REDACTED]

24 [REDACTED]

25 [REDACTED] 06:17:35

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1 Q. (By Mr. Melamed) Do you know how far 06:17:35  
2 back the information in the gatekeeper tool goes?

3 MR. SCHWING: Outside the scope.

4 Go ahead.

5 THE DEPONENT: Yeah, I'm -- I'm not an 06:17:55  
6 expert in the -- the data retention policies of  
7 the -- of the gatekeeper tools, so I'm afraid I  
8 don't have an answer for that question.

9 Q. (By Mr. Melamed) Okay. I'm not --  
10 I'm -- I understand you're not an expert on that. 06:18:07

11 And I'm just trying to determine if this is  
12 something that we are going to want to ask for that  
13 has not been produced in the case. I'm trying to  
14 understand the type of information it contains.

15 How that type -- how that information differs, if 06:18:17  
16 at all, from the capabilities tool, and whether it  
17 still exists in the gatekeeper tool.

18 Do you have any idea how far back the  
19 data in gatekeeper tool goes? And not as an -- not  
20 as an expert -- not as the witness for Facebook. 06:18:34

21 You individually as you sit here, do you  
22 have any rough idea how far back the information  
23 goes?

24 A. I'm not aware of the data retention  
25 policies in the gatekeeper tool or what -- what is 06:18:49

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1 stored. 06:18:52

2 Q. Is there an individual -- I'm sorry? I  
3 didn't mean to cut you off.

4 A. Sorry, I was -- just going to say, no,  
5 I'm not aware of the -- the data retention policies 06:19:04  
6 of the -- of the information in the gatekeeper  
7 tool.

8 Q. If you were to want to understand more  
9 about the specific type of information in the  
10 gatekeeper tool as it presently exists, who would 06:19:20  
11 you ask at Facebook?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: I would speak to  
14 Mr. Molaro in the first instance.

15 SPECIAL MASTER GARRIE: Counsel Melamed, 06:19:35  
16 I'm going to encourage you to go to the next topic  
17 since it's -- he's not an expert on it and has no  
18 personal knowledge of it. And so on and so forth.

19 MR. MELAMED: Okay. Understood. I -- I  
20 was trying to understand the way in which Facebook 06:19:49  
21 tracks data.

22 SPECIAL MASTER GARRIE: Counsel Schwing.

23 MR. MELAMED: I'm sorry.

24 SPECIAL MASTER GARRIE: Counsel Schwing,  
25 can you identify for plaintiff somebody who is the 06:19:59

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1 system or project or product manager of gatekeeper 06:20:01  
2 internal to Facebook, and have that dialogue  
3 offline, please, with Counsel Melamed; and  
4 determine if it A, is reasonable; B, is responsive  
5 and C, is appropriate. 06:20:13

6 But, at a minimum, provide further  
7 context so we can keep today as going forward. If  
8 appropriate. If you disagree so be it but...

9 MR. SCHWING: Yeah, I -- I -- I believe  
10 Mr. Cross has testified that the capabilities tool 06:20:28  
11 that the gatekeeper information in the capabilities  
12 tool has been migrated -- I'm sorry, in the  
13 gatekeeper tools are migrated in the capabilities  
14 tool. But I'm happy to discuss that offline, and I  
15 agree with moving -- moving along in the 06:20:42  
16 deposition.

17 SPECIAL MASTER GARRIE: Okay. Thank you.

18 MR. MELAMED: Thank you. And can I just  
19 extend that that request to include the site bar  
20 tool as well. 06:20:50

21 MR. SCHWING: We're happy to meet and  
22 confer with you, Matt.

23 MR. MELAMED: Okay. Just -- just for the  
24 record noted that Mr. Cross identified the site bar  
25 tool as another source of information in June 2018 06:21:04

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1 to pull together [REDACTED] 06:21:10  
2 [REDACTED] with  
3 [REDACTED] after 2015.  
4 That's the purpose I'm asking for it. And I  
5 understand -- I'm happy to talk to you about that 06:21:23  
6 offline.  
7 SPECIAL MASTER GARRIE: Just because --  
8 just let me weigh in here, so we heard that. I  
9 just want to set -- level set here. If the  
10 information exists in one source, and it is 06:21:32  
11 accessible and provided it's not necessary that all  
12 sources need to be searched.  
13 So I just want to keep that in mind,  
14 Counsel Schwing. So before you go down the rabbit  
15 hole, maybe first find out how the systems work 06:21:45  
16 together and what data is in which, so that way we  
17 don't have a lot of conversation about something  
18 that may be encapsulated in something you've  
19 already engaged with. So just meet and confer.  
20 And work that out. 06:21:58  
21 But more importantly, let's keep on point  
22 with Mr. Cross, Mr. Melamed -- or Counsel Melamed  
23 and Counsel Schwing, and move to next topic. And  
24 this is noted on the record and we'll keep it  
25 going. 06:22:09

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1 MR. SCHWING: Thank you. 06:22:10

2 MR. MELAMED: Thank you.

3 Why don't we take a five-minute break.

4 MR. SCHWING: Okay.

5 THE VIDEOGRAPHER: Okay. We're off the 06:22:17

6 record. It's 6:22 p.m.

7 (Recess taken.)

8 THE VIDEOGRAPHER: We're back on the

9 record. It's 6:38 p.m.

10 MR. MELAMED: So thank you for your 06:38:16

11 testimony, Mr. Cross, on topics 2 -- on behalf of

12 plaintiffs, we think we're going to need additional

13 testimony from a Facebook designee about some

14 questions you were unable to provide answers to.

15 But we'll deal with that off the record. I just 06:38:32

16 want to establish that on the record.

17 Otherwise thank you for your time. And I

18 understand that Mr. Loeser is going to return for

19 some follow-up questioning regarding topics 6 and

20 7 after a short break, or after a break. 06:38:48

21 MR. SCHWING: I -- I -- this is not the

22 time or place to argue. So we can talk about that

23 off -- offline. Matt, we had four days of -- of,

24 you know, five days almost now testimony and we

25 will meet and confer with you about that, and, 06:39:08

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1 you know, and try to work through the issues. And 06:39:11  
2 as necessary and appropriate work with the  
3 Special Master, and I'm happy to talk to you about  
4 that.

5 MR. MELAMED: Thank you. 06:39:21

6 We can go off the record.

7 (Discussion off the stenographic record.)

8 THE VIDEOGRAPHER: We're off the record.

9 It's 6:40 p.m.

10 (Recess taken.) 06:40:21

11 THE VIDEOGRAPHER: We're back on the

12 record. It's 7:29 p.m.

13 EXAMINATION

14 BY MR. LOESER:

15 Q. It is still good morning for me, 07:37:08

16 Mr. Cross, but it's good evening for you.

17 And I have some questions. Hopefully it  
18 won't take too long so we'll jump in and get  
19 started.

20 Are you able to continue testifying now? 07:37:26

21 A. Yeah, let's keep going.

22 Q. Okay. Mr. Cross, in 2018 after --

23 MR. SCHWING: I'm sorry to interrupt you,

24 Mr. Loeser, it's just before we -- we can either do

25 this now or later. Before the -- the testimony 07:37:41

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1 started back up, I indicated that Mr. Cross wanted 07:37:44  
2 to clarify something in his testimony. I'll leave  
3 it to you as to whether or not you want to do that  
4 now or in a little bit.

5 MR. LOESER: If it's okay with you, I'm 07:37:55  
6 fine if you want to just ask him for his  
7 clarification on -- on a redirect type basis. That  
8 I think probably works best for the record. If  
9 that works for you.

10 MR. SCHWING: Sure. That's fine. Thank 07:38:08  
11 you.

12 Q. (By Mr. Loeser) Mr. Cross, in 2018 after  
13 the Cambridge Analytica scandal broke, Facebook  
14 received negative press about its data sharing  
15 practices with apps and partners, correct? 07:38:20

16 MR. SCHWING: Outside the scope. Object  
17 to form.

18 THE DEPONENT: I recall a number of  
19 articles about Cambridge Analytica.

20 Q. (By Mr. Loeser) And were any of those 07:38:36  
21 articles -- would you consider any of those  
22 articles as having been negative press about  
23 Facebook's data sharing practices?

24 MR. SCHWING: Same objections.

25 THE DEPONENT: I recall concerns being 07:38:52

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1 raised in -- in the media regarding -- regarding 07:38:54  
2 the Cambridge Analytica situation, yes.

3 Q. (By Mr. Loeser) And Mr. Cross, after the  
4 Cambridge Analytica scandal broke, Facebook sought  
5 to sort out and identify which apps and partners 07:39:07  
6 continued to have access to friends data through  
7 whitelist; is that correct?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: After Cambridge Analytica  
10 the company -- the company undertook a number of 07:39:24  
11 efforts to -- to understand and identify  
12 applications that had access to information.

13 Q. (By Mr. Loeser) And sir, that  
14 investigation looked specifically into applications  
15 that had access to information through whitelists, 07:39:43  
16 right?

17 MR. SCHWING: Outside the scope.

18 THE DEPONENT: My understanding is that  
19 the -- the work that was done included looking at  
20 the whitelists. But it also included other 07:40:01  
21 areas -- areas of inquiry too.

22 Q. (By Mr. Loeser) And, Mr. Cross, isn't it  
23 the case that Facebook struggled to identify all of  
24 the apps and partners that had access to friends  
25 data through whitelist? 07:40:17

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1 MR. SCHWING: Vague. 07:40:20

2 THE DEPONENT: The team working on  
3 this -- this work faced -- faced a number of  
4 challenges in pulling together a complete  
5 understanding. And they -- they worked hard to do 07:40:37  
6 so.

7 Q. (By Mr. Loeser) And Mr. Cross, what were  
8 the challenges that the team investigating  
9 whitelists and specifically whitelists that  
10 provided access to friends database? 07:40:51

11 MR. SCHWING: Object to form. Outside  
12 the scope.

13 THE DEPONENT: So I wasn't -- I wasn't  
14 there at the time, I'm afraid. But -- sorry. It's  
15 hard to comment precisely on all of the challenges 07:41:10  
16 that -- that were faced at the time.

17 Q. (By Mr. Loeser) Mr. Cross, can you  
18 testify as to any of the challenges that were faced  
19 at the time?

20 A. So there were a number of different 07:41:30  
21 whitelists in place, and different mechanisms for  
22 API access. And the team had to pull together  
23 to -- and did, in order to like fully understand  
24 API access at the time.

25 Q. And, Mr. Cross, was one of the challenges 07:41:58

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1	faced by the team trying to identify all of the	07:42:03
2	apps and parties that were whitelisted, the result	
3	of how records were kept at Facebook of	
4	whitelisting?	

5 MR. SCHWING: Object to form. 07:42:17

6 THE DEPONENT: I can't say whether or not  
7 that's the -- the challenges that the -- that the  
8 team involved were -- were working through.

9 Q. (By Mr. Loeser) Was there one place  
10 or -- or one source of information that the team 07:42:37  
11 could look for to identify all of the whitelists  
12 that provided access to friend data?

13           A.     My understanding is the team had to look  
14       at -- at a few sources of information, and they did  
15       so in order to pull together some understanding.                     07:42:59

16 Q. Was there more than one group or team  
17 that could make the decision to whitelist apps and  
18 partners?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: Can you help me 07:43:19  
21 understand, what do you understand by whitelist and  
22 partners in what context?

23 Q. (By Mr. Loeser) In the context of the  
24 discussion we're having now about providing access  
25 to friend data. 07:43:30

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1 MR. SCHWING: Object to form. 07:43:35

2 THE DEPONENT: So there were different

3 teams involved in managing access, the -- the

4 migration of the APIs in 2014 and 2015. And so

5 it's possible the number of people involved. 07:43:58

6 Q. (By Mr. Loeser) What -- what were the

7 different teams?

8 MR. SCHWING: Object to form. Outside

9 the scope.

10 THE DEPONENT: My understanding is there 07:44:13

11 were several teams involved, the platform

12 partnerships team, for example, and we have all

13 partnerships teams, so those were two examples of

14 teams that would have been involved.

15 Q. (By Mr. Loeser) And are those teams that 07:44:32

16 had the authority to whitelist an app or a partner

17 to have continued access to friend data?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: Can you be specific about

20 the -- the time period you're talking about. 07:44:47

21 Q. (By Mr. Loeser) The period after 2014

22 when Graph API -- AP [sic] version 2 was uploaded?

23 A. I'm sorry, what was the original question

24 again?

25 Q. Did each of the teams you just mentioned 07:45:09

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1 have authority to whitelist apps or partners to 07:45:11  
2 have continued access to APIs that emit friend  
3 data?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: The decision to whitelist 07:45:22  
6 apps for continued access to friend permissions,  
7 for example, was taken on a -- on a case-by-case  
8 basis among mul- -- multiple teams to come to a  
9 recommendation decision.

10 Q. (By Mr. Loeser) Okay. List for me all 07:45:41  
11 of the teams that had the ability to do that?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: I wouldn't be able to,  
14 you know, a list of every single team that may have  
15 been involved. Over time I can talk to some of the 07:45:58  
16 ones I've already identified. There's the platform  
17 product team, the platform partnerships teams and  
18 they're the folks that would have worked together  
19 to -- to come to a recommendation.

20 MR. LOESER: I'm going to introduce an 07:46:22  
21 exhibit which is tab 34, which you should see  
22 momentarily. And this is Exhibit 434.

23 Q. (By Mr. Loeser) And while this is coming  
24 up, I'll tell you this is an email from Dan Rose to  
25 Ime Archibong dated 6/22/2018 subject "Re: 07:46:59

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1 V1 extensions." 07:47:03

2 Do you see that, Mr. Cross?

3 A. I do see that.

4 Q. Why don't you take a minute to -- to look

5 through the email string. And I have a few 07:47:13

6 questions for you about the string.

7 A. Sure. Thank you.

8 MR. SCHWING: Mr. Loeser, I think for the

9 record this was previously marked not too long ago

10 as 433, Exhibit 433. 07:47:45

11 MR. LOESER: Thank you for that

12 clarification. We'll correct that.

13 MR. SCHWING: So you've -- you've now --

14 well, you can do what you want. If you want to

15 have it as an exhibit twice I just want to make 07:48:02

16 sure there's no confusion.

17 MR. LOESER: Why don't we go off the

18 record real quickly.

19 THE VIDEOGRAPHER: Going off the record.

20 It's 7:48 p.m. 07:48:17

21 (Recess taken.)

22 THE VIDEOGRAPHER: We're back on the

23 record. It's 7:50 p.m.

24 MR. LOESER: So for the record, we just

25 marked an exhibit and didn't realize it had just 07:50:58

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1       been marked previously today, in fact. So we will                   07:51:01  
2       pull down the second version of the same exhibit  
3       and just refer to the originally marked version,  
4       which is Exhibit 433.

5           Q.     (By Mr. Loeser) And I have a couple more           07:51:16  
6       questions about this exhibit.

7           Mr. Melamed asked you a few questions  
8       already. So obviously I won't reask those. But  
9       fair to say -- have you had a chance to take a look  
10      at this or do you recall from your earlier review           07:51:31  
11      of it today what it's about?

12          A.     I have had a chance to review this just  
13      now, thank you.

14          Q.     Okay. So fair to say this email string  
15      discusses the challenges Facebook faced in 2018           07:51:45  
16      when trying to identify all the apps and partners  
17      with continued access to friend data after 2014?

18           MR. SCHWING: Object to the form.

19           THE DEPONENT: This is conversation  
20      between three people, and in the partnerships           07:52:00  
21      organization they're -- they're discussing an  
22      ongoing process to -- to determine a list of apps  
23      that had access to additional permissions after  
24      May 2015.

25          Q.     (By Mr. Loeser) Let's look at the -- if           07:52:25

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1 you go to the second page of the string, the 07:52:26  
2 message from Francisco Varela to Ime Archibong and  
3 Dan Rose dated June 22nd, 2018.

4 And at the top of the page you're looking  
5 at, and I'll read the paragraph and then I have 07:52:42  
6 some questions for you about it.

7 Mr. Varela writes "Thanks, Ime. [REDACTED]  
8 been a linchpin in this process thanks to his  
9 institutional knowledge and lack of documentation  
10 on our end." 07:52:55

11 Mr. Cross, was there a lack of  
12 documentation at Facebook about which partners and  
13 apps were whitelisted?

14 MR. SCHWING: Outside of the scope of  
15 topics 6 and 7. 07:53:10

16 THE DEPONENT: So that's -- that's the  
17 phrase I -- I see in the email here. There were --  
18 there was documentation in various forms in various  
19 places. I think that's some of what's being  
20 reflected here. Exactly what these folks are -- 07:53:38  
21 are talking about is -- is the opinion that's being  
22 presented by -- by them in this email.

23 Q. (By Mr. Loeser) And later in the same  
24 paragraph Mr. Varela writes "For clarify, I think  
25 we're in a good spot on the device partners, but 07:53:56

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1 getting surprised now on more traditional platform 07:53:59

2 developers and the Atlas integration." [as read]

3 Can you tell me at Facebook what is the  
4 difference between device partners and traditional  
5 platform developers? 07:54:10

6 A. So traditional platform developers would  
7 refer to apps and integrations that users would log  
8 in with Facebook with and so on to get a social  
9 experience.

10 Device partners refers to examples where 07:54:38  
11 Facebook partnered with device manufacturers in  
12 order to build Facebook experience in -- Facebook  
13 experiences into those devices.

14 Q. And what are "Atlas integrations"?

15 A. I'm not sure what Atlas integrations 07:55:06  
16 means in -- in this context.

17 Q. Do you know what it means in any context?

18 A. I know that Atlas is a company that  
19 Facebook acquired in the past. But precisely what  
20 was meant by an "Atlas integration" is -- is 07:55:24  
21 nothing I know.

22 Q. And why would it be surprising that  
23 traditional platform developers were whitelisted  
24 for access to friend data?

25 MR. SCHWING: Outside the scope of the 07:55:45

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1 deposition. Object to form. 07:55:46

2 THE DEPONENT: So I think what you see in  
3 this email is not necessarily surprised that they  
4 were whitelisted more that the team is attempting  
5 to pull together a full story. 07:56:10

6 Q. (By Mr. Loeser) And is it your  
7 understanding that KP is -- was the most  
8 knowledgeable person at Facebook regarding app and  
9 partner whitelist?

10 MR. SCHWING: Outside the scope of the 07:56:38  
11 deposition.

12 THE DEPONENT: What you see here, and my  
13 understanding is the -- the group of people working  
14 together to -- to attempt to understand the full  
15 picture and KP was a -- a key person in that 07:56:53  
16 process. You see him referred to here as a  
17 linchpin. And my experience working with him is he  
18 was certainly very knowledgeable about how these  
19 processes worked.

20 Q. (By Mr. Loeser) Mr. Cross, to prepare 07:57:11  
21 for your testimony today, did you reach out to KP  
22 and ask him any questions about the whitelisting  
23 process or results?

24 A. I did not speak to KP as part of my  
25 preparations for today. 07:57:28

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1 Q. Mr. Cross, can Facebook identify all apps 07:57:31  
2 that had access to APIs that emit friend data post  
3 2014?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: Again, I think it's 07:57:49  
6 important to -- I'm unclear on what you mean by  
7 "friend data" in this -- in this context.

8 Q. (By Mr. Loeser) Okay. How -- how does  
9 Facebook use the term "friend data"?

10 A. The -- Facebook has used that term in a 07:58:10  
11 number of different ways. Primarily, it refers to  
12 content and information posted by a user that would  
13 be made available via platform.

14 Q. So using that definition, can Facebook  
15 identify all apps that had access to APIs that emit 07:58:36  
16 friend data after 2014?

17 A. So my understanding is Facebook has  
18 altogether an understanding of the apps which had  
19 access to -- to friend data after 2014.

20 Q. Can Facebook identify all Facebook users 07:59:02  
21 who installed apps with access to APIs that emit  
22 friend data after 2014?

23 MR. SCHWING: Object to form. Outside  
24 the scope.

25 THE DEPONENT: I'm not entirely confident 07:59:22

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1 that exactly what -- what Facebook can do in 07:59:24

2 that -- in that respect. Yeah, so -- so sorry.

3 I'm not sure I know what Facebook is able to do.

4 Q. (By Mr. Loeser) Does Facebook keep track

5 of all apps that users install? 07:59:43

6 A. Yes, my understanding is that Facebook

7 understands which apps have -- or which users have

8 authorized which applications.

9 Q. And Facebook also keeps track of all APIs

10 that apps have access to, right? 08:00:08

11 A. I don't think it's as simple as APIs that

12 an app has access to. Facebook tracks a [REDACTED]

[REDACTED]

[REDACTED]

15 Q. Does Facebook track all of the different 08:00:30

16 ways that an app can acquire Facebook user

17 information from the Facebook platform?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: [REDACTED], for

20 example, [REDACTED] 08:00:48

21 [REDACTED]

22 Q. (By Mr. Loeser) So is there ever a

23 situation in -- in which Facebook would not know

24 that an app had access to Facebook user

25 information? 08:01:04

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1 MR. SCHWING: Object to form. 08:01:08

2 Q. (By Mr. Loeser) On the Facebook  
3 platform?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: I'm sorry. I'm not sure I 08:01:18  
6 fully understand the question.

7 Can you ask it again, please.

8 Q. (By Mr. Loeser) Sure.

9 I'm just trying to make sure that the  
10 record is clear on what Facebook knows about apps 08:01:27  
11 that have access to friend data and users whose  
12 information was made accessible to those apps.

13 So you could describe -- describe it in  
14 any way that makes sense to you, but answer that  
15 question. 08:01:41

16 MR. SCHWING: Compound. Vague.

17 THE DEPONENT: Facebook knows [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] to

20 those applications. And together, those things 08:02:10  
21 would help Facebook understand what [REDACTED]

[REDACTED]

23 Q. (By Mr. Loeser) And that would include  
24 what -- which users friend data was accessible to  
25 those apps, right? Let me ask that a different 08:02:29

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1 way. 08:02:36

2 Again, I'm trying to figure out --

3 Facebook knows who all of its users are, right?

4 A. Facebook understands -- has -- Facebook

5 knows who its users are, yes. 08:02:50

6 Q. And Facebook knows which apps those users  
7 install, right?

8 A. Facebook knows which apps users are --  
9 have authorized.

10 Q. And Facebook -- and Facebook knows which 08:03:05  
11 APIs -- apps that use the Facebook platform have  
12 access to?

13 MR. SCHWING: Vague.

14 THE DEPONENT: Facebook [REDACTED]

15 [REDACTED] -- 08:03:23  
16 the Facebook developer platform.

17 Q. (By Mr. Loeser) And Facebook knows which  
18 of those APIs emit friend data, right?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: I mean, Facebook 08:03:39  
21 understands which of those AP- -- APIs emit user  
22 data. But whether or not that data [REDACTED]

[REDACTED]

[REDACTED]

25 Q. (By Mr. Loeser) Whether the information 08:04:12

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1 was accessible was logged however, right? 08:04:13

2 MR. SCHWING: Vague.

3 THE DEPONENT: Again, in what time period  
4 are you referring to here.

5 Q. (By Mr. Loeser) After 2014. 08:04:30

6 A. So again, like -- can you ask the  
7 question again. I want to make sure I'm fully  
8 understanding it.

9 Q. Yes.

10 Again, I'm just trying to make sure the 08:04:54  
11 record is clear on what information Facebook tracks  
12 and has available to it.

13 And we've gone down the list of  
14 questions, and now we're at the question of whether  
15 Facebook knows which apps had access to friend 08:05:06  
16 data.

17 After 2014?

18 A. So -- my understanding is Facebook has an

19 [REDACTED]

20 [REDACTED] after 2015. 08:05:36

21 Q. Mr. Cross, did Aleksander Kogan's sale of  
22 Facebook data he obtained from the friends of users  
23 who installed the, This Is Your Digital Life app,  
24 exceed the use case for the app?

25 MR. SCHWING: Outside the scope of the 08:06:10

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1 deposition and object to form. 08:06:12

2 THE DEPONENT: That seems to be a  
3 question about platform policy as -- as written,  
4 which is not something I'm -- I'm particularly well  
5 qualified to -- to provide an opinion on. I think 08:06:30  
6 the best person to ask that question to would be  
7 Ally Hendrix.

8 SPECIAL MASTER GARRIE: Mr. Cross, while  
9 I appreciate you telling who's the -- are you  
10 saying in your 30(b)(6) capacity that's who you 08:07:01  
11 believe is the best person. You're not -- you're  
12 not able to answer that question today as you sit  
13 here, is that -- I was just reading the transcript.  
14 So I'm a second behind, but I want to make sure I  
15 understood your answer. 08:07:18

16 Can you answer that question or not, as  
17 the 30(b)(6) capacity, right, let's be clear.

18 MR. SCHWING: Yeah, and -- and we've got  
19 a scope objection there.

20 SPECIAL MASTER GARRIE: Yeah, with the 08:07:37  
21 scope objections noted on the record. I just --  
22 Mr. Cross?

23 THE DEPONENT: Yeah, that -- that --

24 SPECIAL MASTER GARRIE: If you're not  
25 prepared -- like let me be clear. There's three 08:07:49

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1 possible answers. I'm not prepared to answer the 08:07:52  
2 question. I am prepared to question [sic]. I  
3 don't understand the question.

4 THE DEPONENT: Yeah, I'm not prepared to  
5 answer the question. I think that's a question 08:07:59  
6 about platform policy and it's determination of the  
7 platform policy, which is not something that I'm  
8 prepared to testify on.

9 SPECIAL MASTER GARRIE: And that's what I  
10 thought I understood your answer as. I just wanted 08:08:09  
11 to clarify it for the record. Thank you.

12 Back to you, Counsel Loeser.

13 Q. (By Mr. Loeser) And regardless of  
14 whether you -- you believe you're prepared as a  
15 30(b)(6) witness to testify to that or not which is 08:08:18  
16 a question I suppose for another day, can you  
17 answer the question?

18 A. You're asking me in a personal capacity  
19 to answer the question?

20 Q. I'm just asking you to answer the 08:08:35  
21 question. In what capacity you answer it I suppose  
22 is something that can be determined. But I would  
23 like for you to answer the question.

24 MR. SCHWING: Outside of the scope.

25 Object to form. 08:08:48

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1 THE DEPONENT: Yeah, I can try answering 08:08:51  
2 the question again. We've had a number of things  
3 go by, and if I'm going to try to answer it, I  
4 should hear it again.

5 Q. (By Mr. Loeser) Did Aleksander Kogan's 08:08:57  
6 sale of Facebook data he obtained from the friends  
7 of users who installed the, This Is Your Digital  
8 Life app, exceed the use case for the app?

9 MR. SCHWING: Same objections.

10 THE DEPONENT: Again, I don't feel I can 08:09:14  
11 provide a Facebook answer in -- a company answer in  
12 response to that question. I don't feel I'm the  
13 most qualified person to do so. My understanding  
14 is that developers shouldn't be sharing information  
15 they received from the Facebook with a -- with an 08:09:29  
16 unrelated other party.

17 Q. (By Mr. Loeser) And would that be  
18 considered a use-case violation?

19 MR. SCHWING: It's outside of the scope  
20 of the deposition. Object to form. 08:09:43

21 THE DEPONENT: Again, that's -- that's a  
22 question about platform policy, which I don't --  
23 which I don't feel well prepared to answer on, I'm  
24 afraid.

25 Q. (By Mr. Loeser) Okay. Can you answer 08:09:58

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1 the question? 08:09:59

2 A. Again, I don't feel like I can answer the  
3 question. As -- it would require me to have,  
4 you know -- interpret policy which is not something  
5 that I'm -- I'm an expert in being able to do. 08:10:10

6 Q. So you're not able to answer that  
7 question.

8 MR. SCHWING: Same objections.

9 THE DEPONENT: Yeah, I don't -- I don't  
10 feel -- I don't feel comfortable giving an answer 08:10:25  
11 to that question given -- I'm just not that well  
12 versed in Facebook's platform policy. And I want  
13 to make sure that you get the right answers to your  
14 questions.

15 MR. SCHWING: Special Master Garrie, may 08:10:42  
16 I make a Rule 30 motion without Mr. Cross present.

17 SPECIAL MASTER GARRIE: Yeah, Mr. Cross  
18 you can -- can you go to the break out room.

19 THE DEPONENT: Sure.

20 MR. SCHWING: Special Master Garrie, 08:11:03  
21 Mr. Loeser is supposed to be asking questions about  
22 topics 6 and 7. Mr. Cross is not designated to  
23 discuss the use-case issues that are being asked  
24 about. He's made that clear, but Mr. Loeser  
25 continues to ask the questions. 08:11:18

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1 Mr. Cross is going to be providing 08:11:20  
2 another deposition later in his personally  
3 capacity. We've been going for now, you know, near  
4 five days and we need to try to finish. So I would  
5 request some relief here that we try to speed this 08:11:32  
6 along on the topics he's actually designated for.

7 MR. LOESER: May I be heard,  
8 Special Master Garrie.

9 SPECIAL MASTER GARRIE: Yeah.

10 MR. LOESER: So I'm asking questions that 08:11:43  
11 are specifically and directly about friend sharing  
12 and whitelisting. And friend sharing is what  
13 Cambridge Analytica is all about. The notice, in  
14 fact, refers to use cases with regard to  
15 whitelisting which is what I'm about to ask further 08:11:56  
16 questions on. I don't have more questions about  
17 Cambridge Analytica. So we can move on from that.

18 But it is simply not true that questions  
19 about Cambridge Analytica which is friend sharing,  
20 the whole scandal friend sharing, does not relate 08:12:08  
21 to the topic of friend sharing identified in the  
22 notice.

23 So I don't think we need to have a long  
24 fight about it because I don't have further  
25 questions about the use-case issue regarding friend 08:12:16

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1 sharing, but I do have some additional questions 08:12:21  
2 about use case relating to whitelisting because  
3 it's specifically identified in --

4 SPECIAL MASTER GARRIE: It does state it  
5 in the notice. 08:12:27

6 Counsel Schwing, any comment?

7 MR. SCHWING: So topic 6 is related to  
8 the development of friend sharing, that's the  
9 topic, the development of friend sharing. So this  
10 is, you know, what we ought to be focused on. I 08:12:45  
11 don't see -- so where -- where is this bit about --  
12 the use case that you're talking about.

13 MR. MELAMED: 7A says and whether the  
14 access granted exceeded the use case.

15 MR. SCHWING: Okay. And 7 is, the topic 08:13:03  
16 is the decision to whitelist particular apps or  
17 partners.

18 MR. LOESER: That's what I'm about to  
19 talk about --

20 MR. SCHWING: Sorry. Please let me 08:13:14  
21 finish, Mr. Loeser.

22 MR. LOESER: Sorry.

23 MR. SCHWING: The decision to whitelist  
24 particular apps or partners and how Facebook  
25 determined which entities to whitelist. 08:13:18

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1                   So the topic is not sort of anything and                   08:13:20  
2                   everything ever to do with, you know, about  
3                   whitelisting. It's a specific narrow topic. It  
4                   sounds like Mr. Loeser is moving -- moving along  
5                   and I -- I think we all share a mutual interest                   08:13:32  
6                   in -- in finishing. I just want to make sure that  
7                   we're not --

8                   SPECIAL MASTER GARRIE: I agree. I am  
9                   ready to rule.

10                  So Mr. Loeser, your questions he's                   08:13:40  
11                  answered them. They are gracefully in a gray zone  
12                  that will bear into an area where it will prove  
13                  more problematic for you. So if you're moving to  
14                  the next set of questions as 7A dictates you're  
15                  more than welcome to cover that topic as indicated                   08:13:58  
16                  and as defined. I don't have any problems with  
17                  that. And I think that is appropriate.

18                  So I will move -- we will move forward  
19                  with the questions. But friend sharing does relate  
20                  to a use case under 7A, under whitelisting                   08:14:15  
21                  defend- -- depending -- the definition of  
22                  whitelisting is defined as what Mr. Loeser --  
23                  Counsel Loeser?

24                  MR. LOESER: Whitelisting is providing --  
25                  Mr. Cross has defined it as providing access to                   08:14:33



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1 nonpublic APIs and private APIs, so... 08:14:35

2 I mean, I -- that's what I'm asking  
3 about. And --

4 SPECIAL MASTER GARRIE: I get it. I  
5 agree. So that's fine. We'll move along. I think 08:14:45  
6 that makes sense.

7 Counsel Schwing, we'll move it along. I  
8 agree. But I do think that there is a pretty wide  
9 birth under 7A for as long as it stays focused on  
10 the whitelisting topic. And I think it's within 08:15:01  
11 the scope of, while narrow is very specific in --  
12 in its application.

13 Any last comments, Counsel Schwing or...

14 MR. SCHWING: Yeah, I mean, I think all  
15 of 7 kind of ties back to the beginning of it which 08:15:24  
16 is the decision to whitelist particular apps or  
17 partners and how Facebook determined which entities  
18 to whitelist. You know, the issues about exceeding  
19 the use case. I mean, there's a whole -- there was  
20 a whole separate deposition about that. 08:15:41

21 SPECIAL MASTER GARRIE: Yeah.

22 MR. SCHWING: And so look, I think we can  
23 move along. I just -- to the extent that they're  
24 repeated questions about, you know, that he's --

25 SPECIAL MASTER GARRIE: Let me put it to 08:15:51

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1 you differently. I agree with Counsel Schwing in 08:15:52  
2 the fact that when you ask a question  
3 Counsel Loeser, and he says "I'm not here to  
4 testify about it." And then he says it again "I'm  
5 not here to testify about it." 08:16:00

6 That should be sufficient for you to move  
7 onto another question and keep it moving forward,  
8 generally speaking. Or you can make a motion or  
9 Rule 30 motion and we go and excuse the witness and  
10 discuss it future. But I don't think asking the 08:16:15  
11 witness the same thing will prove to be effective.

12 MR. LOESER: Yeah, that -- that's fine.  
13 I mean, you know, typically a scope objection is  
14 made, 30(b)(6) witnesses testify all the time.  
15 There's always a fight about whether it's in scope 08:16:29  
16 or out of scope and if they provide what becomes  
17 personal testimony there's nothing. That's just  
18 how it -- how it works.

19 I'd also just note just so it's clear, I  
20 think Mr. Schwing and I have a slightly different 08:16:39  
21 understanding of how a notice operates under  
22 30(b)(6). The law is quite clear that it sets the  
23 minimum not the maximum of what you can ask about.

24 SPECIAL MASTER GARRIE: I'm -- I'm not --  
25 I'm not talking about scope. I'm talking about 08:16:49

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1 form. 08:16:51

2 What I'm saying is, if you want to ask in  
3 your personal capacity or in your non30(b)(6)  
4 capacity to get -- he said, "I'm not here to  
5 testify in my" -- as -- "as a representative of 08:17:00  
6 Facebook to answer this question."

7 You said, "Will you answer this  
8 question."

9 And then he said, "Do you mean in my  
10 personal capacity?" 08:17:09

11 And your response was "Just answer the  
12 question."

13 So if you want him to answer the question  
14 in his personal capacity, he will. But he will not  
15 answer -- and that resulted in a circular set of 08:17:19  
16 questions where you asked him again the exact same  
17 question and ended up at the exact same point.

18 So you would need to offer that  
19 clarification because he has answered the question  
20 as he understood it, which was you are asking him 08:17:30  
21 in his professional 30(b)(6) capacity. Which is  
22 why he answered it accordingly. Whether you agree  
23 or not, that was the answer provided. We went in a  
24 circle and got back to the same point.

25 MR. LOESER: Yeah, well, fortunately I 08:17:44

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1 don't have any more questions on that. And I do 08:17:44  
2 have questions on whitelisting and use cases --  
3 SPECIAL MASTER GARRIE: That's fine.  
4 Let's get it on the road. Show on the road.  
5 MR. LOESER: I think Austin and I have a 08:17:53  
6 common and -- and clear desire to make this  
7 deposition over with. So --  
8 MR. SCHWING: This is --  
9 SPECIAL MASTER GARRIE: Let's be clear  
10 I -- I'm not opining with the minimum or maximum. 08:18:01  
11 I am opining, though, with the format -- the form  
12 of how it goes. So we'll get the witness back.  
13 But just keep that in the back of your mind,  
14 Counsel Loeser --  
15 MR. LOESER: Sure. 08:18:13  
16 SPECIAL MASTER GARRIE: -- that if it  
17 happens again I'll cut it off, and I'll just tell  
18 you to ask the next question. Or you can tell him  
19 in your personally capacity. Because you have to  
20 explain to the witness the question you're asking 08:18:20  
21 so he can then answer the question. He couldn't  
22 answer the question because he didn't understand  
23 how you were asking him.  
24 MR. LOESER: Understood.  
25 SPECIAL MASTER GARRIE: Okay. 08:18:30

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1 MR. SCHWING: I'll go get Mr. Cross here 08:18:31  
2 and we'll get back. Yeah. I mean, look, I want to  
3 get done too. This is, you know, nobody wants to  
4 prolong this. So okay. Let me -- I need to go  
5 tell my housekeeper to stop vacuuming, and then I 08:18:40  
6 will be right back.

7 SPECIAL MASTER GARRIE: Okay.

8 THE VIDEOGRAPHER: Go off the record?

9 SPECIAL MASTER GARRIE: Go off the record  
10 for two minutes I guess. 08:18:53

11 THE VIDEOGRAPHER: Okay. We're off the  
12 record. It's 8:18 p.m.

13 (Recess taken.)

14 THE VIDEOGRAPHER: We're back on the  
15 record. It's 8:23 p.m. 08:23:24

16 Q. (By Mr. Loeser) Mr. Cross, what  
17 examination has Facebook done to determine whether  
18 apps whitelisted for access to APIs that emit  
19 friend data exceeded the use case for the apps  
20 after 2014? 08:23:38

21 MR. SCHWING: Object to form.

22 THE DEPONENT: My understanding is that  
23 the partnerships team [REDACTED]  
24 and -- and either [REDACTED]  
25 [REDACTED] or determined that the -- the 08:24:06

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1 application [REDACTED] 08:24:10

2 Q. (By Mr. Loeser) And when did that occur?

3 A. It was a process in 2018 and early 2019

4 to [REDACTED] that had been [REDACTED]

5 [REDACTED] and -- and [REDACTED] 08:24:36

6 [REDACTED]

7 Q. And did that same investigation also

8 examine whether partners with private APIs that had

9 access to friend data that exceeded the -- the

10 permissions for that data? 08:24:54

11 A. Sorry.

12 Q. Let me ask that again.

13 You asked the question with regard to

14 apps with access to APIs emit friend data. And

15 does the same investigation you describe did that 08:25:07

16 also investigate private APIs access to friend data

17 for specific partners?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: My understanding is that

20 an exercise in 2018 looked [REDACTED] 08:25:30

21 [REDACTED] -- to

22 [REDACTED]

23 [REDACTED]

24 Q. (By Mr. Loeser) Has Facebook undertaken

25 any backward looking assessment of how third 08:25:43

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1 parties with access to friend data after 2014 used 08:25:47

2 that data?

3 A. Friend data after 2014? Sorry, do you

4 mean after -- like the deprecation of API -- public

5 deprecation of API version 1 or what -- 08:26:11

6 Q. Yeah.

7 A. -- in 2014.

8 Q. Yes, that transmission is the new

9 platform and you -- I'm wondering if Facebook has

10 looked at -- well, let me give you an example. 08:26:19

11 Has Facebook evaluated whether Apple

12 shared friend data it received after 2015 with

13 additional third parties?

14 MR. SCHWING: Object to form.

15 THE DEPONENT: I -- I don't know whether 08:26:40

16 or not Facebook has investigated one particular --

17 that particular application that you're -- or that

18 particular partner that you're referencing there.

19 Q. (By Mr. Loeser) Mr. Cross, topic --

20 topic 7B asks for "the most efficient way to 08:27:17

21 establish payments, revenues, exchanged value

22 actual or promised, that Facebook received for" --

23 "for permitting whitelisting capabilities."

24 And in your preparations for your

25 testimony for this -- on this topic, did you 08:27:54

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1 investigate that question? 08:27:59

2 A. I spoke to a number of people involved in  
3 the API changes and in around 2014 and '15 to  
4 understand their understanding of how decisions  
5 were made. 08:28:26

6 Q. And specifically with regard to payments,  
7 revenues, exchanged value actual or promised, who  
8 did you talk to to drill down on whether any such  
9 payments, revenues, exchanged value actual or  
10 promised were provided to Facebook for permitting 08:28:44  
11 whitelisting?

12 A. I spoke to Ime Archibong. I spoke to  
13 Francisco Varela, and those are the two names off  
14 the top of my head. I spoke to a number of people  
15 involved in this -- in preparation for today. 08:29:08

16 Q. Did you speak to anyone who worked on  
17 the -- in an advertising department at Facebook?

18 A. Did I speak to anyone in advertising  
19 department.

20 Q. Or more broadly, anyone that -- that was 08:29:30  
21 involved in the business of advertising on the  
22 Facebook platform?

23 A. I spoke with Vatsal Mehta. Who's  
24 involved in -- in that side of the company as I  
25 understand it. 08:29:49

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1 Q. Okay. And what -- what did -- is that 08:29:49  
2 a -- what was that person's name, I'm sorry?  
3 A. Vatsal Mehta.  
4 Q. Could you spell the first name.  
5 A. V-A-T-S-A-L. The surname is Mehta. 08:30:07  
6 M-H-E-T-A [sic] I think.  
7 Q. And what did you learn from Mr. Mehta?  
8 A. He was not able to identify for me  
9 examples of how Facebook received payments for  
10 whitelisting. 08:30:34  
11 Q. Now, the next paragraph clause in the  
12 notice says "and the revenues and net profits  
13 Facebook recognized related to whitelisting through  
14 the class period."  
15 Did you investigate anything of value 08:30:54  
16 received by Facebook that related to whitelisting?  
17 MR. SCHWING: Outside the topic.  
18 THE DEPONENT: Again, I spoke to a number  
19 of people who were involved in whitelisting and  
20 partnerships to understand if they had any 08:31:19  
21 understanding of value received or payments made.  
22 MR. LOESER: All right. If we can put up  
23 Exhibit 339.  
24 Q. (By Mr. Loeser) Mr. Cross, I'm showing  
25 you what was previously marked as Exhibit 339. 08:32:03

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1 Which was the PowerPoint prepared by Monica Mosseri 08:32:04  
2 that goes through "Criteria for granting Exemptions  
3 and Extensions."

4 Do you recall this exhibit?

5 A. Yes, I recall this -- us reviewing this 08:32:16  
6 before.

7 Q. And do you recall that the PowerPoint  
8 goes through what Facebook had to lose in the  
9 transition to the new platform from the partners?

10 MR. SCHWING: Object to form. 08:32:40

11 THE DEPONENT: Before I answer can I take  
12 a moment to -- to look through and refamiliarize  
13 myself with the -- with the document.

14 Q. (By Mr. Loeser) You can, but I don't  
15 have substantive questions about the document. I'm 08:32:49  
16 not going to go back over it. I want to ask you  
17 more what you have done to investigate the topics  
18 identified in the document.

19 But please if you want, take your time.

20 A. Okay. I've had a quick -- quick slice 08:33:18  
21 through. Thank you.

22 Q. So you recall in this PowerPoint there  
23 was an evaluation of what Facebook had to lose if  
24 partners stopped using the Facebook platform  
25 because of the deprecation of permissions. 08:33:30

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1 MR. SCHWING: Object to form. 08:33:33

2 THE DEPONENT: Sorry, another reminder

3 this is a -- my understanding is that this is a

4 draft deck. It says that on the first page. It --

5 it's worth noting. 08:33:47

6 So what was the question you have,

7 Mr. Loeser.

8 Q. (By Mr. Loeser) I was just asking you if

9 you recalled what the subject matter is of the

10 PowerPoint was, having reviewed it yet? 08:33:58

11 A. My understanding is that this is a -- a

12 draft deck by someone in the partnership --

13 partnerships team looking into potential ways to

14 think about whether or not certain apps should be

15 granted exemptions or extensions. 08:34:22

16 Q. And did you search for other versions of

17 this PowerPoint to prepare for your testimony

18 today?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: I didn't search for other 08:34:37

21 versions of this -- of this PowerPoint, no.

22 Q. (By Mr. Loeser) Did you talk to -- try

23 and talk to Ms. Mosseri?

24 A. I did not try and talk with Ms. Mosseri

25 because my understanding is she's no longer an 08:35:02

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1 employee of Facebook. 08:35:06

2 Q. And that's why you didn't talk to her?

3 A. My understanding is that yes, because she

4 is not employed at Facebook and it's not

5 appropriate to reach out to her. 08:35:20

6 Q. Did you talk to or seek to find out if

7 anyone else received this PowerPoint who still

8 works at Facebook?

9 A. I didn't, like, try and understand who

10 else might have received this PowerPoint. However, 08:35:44

11 I have spoken to Mr. Archibong who likely may have

12 received this -- this PowerPoint at some time.

13 Q. And did you talk to him about this

14 PowerPoint?

15 A. I talked to him about the -- his 08:36:04

16 understanding of how valuations were -- were made

17 about apps to whitelisting.

18 Q. But did you talk to him specifically

19 about this PowerPoint?

20 A. I don't recall showing this PowerPoint to 08:36:21

21 Mr. Archibong, but we talked in general about the

22 topics contained within.

23 Q. Did you talk to him about what Facebook

24 had to lose if certain partners stopped using the

25 Facebook platform? 08:36:36

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1 MR. SCHWING: Object to form. 08:36:40

2 THE DEPONENT: We discussed whether or  
3 not, what the potential implications of the changes  
4 might be and how Facebook -- how he and his  
5 partnerships team thought about those potential 08:36:56  
6 changes.

7 Q. (By Mr. Loeser) That's not quite what I  
8 asked you. So I will -- if you can answer the  
9 question I had asked I would appreciate it. Which  
10 if I could get this computer to work I read back to 08:37:13  
11 you.

12 MR. SCHWING: The court reporter could --

13 MR. LOESER: Yeah, I have it now. I'm  
14 sorry, Austin. I didn't mean to interrupt you.

15 MR. SCHWING: Yeah, if -- if you could 08:37:25  
16 read it again that would be wonderful, thank you.

17 Q. (By Mr. Loeser) Did you talk to  
18 Mr. Archibong about what Facebook had to lose if  
19 certain partners stopped using the Facebook  
20 platform? 08:37:38

21 MR. SCHWING: Object to form.

22 THE DEPONENT: We talked about -- me and  
23 Mr. Archibong talked about the potential  
24 implications for the developing ecosystem from  
25 these changes that were proposed at the time. 08:37:54

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1 Q. (By Mr. Loeser) And Mr. Cross, did that 08:37:57  
2 include what Facebook had to lose if certain  
3 partners stopped using the platform?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: We talked about the 08:38:11  
6 potential impact to developers and -- and the  
7 developer ecosystem which would be an impact on --  
8 on Facebook.

9 Q. (By Mr. Loeser) Mr. Cross, I'm just  
10 trying to get a straightforward yes-or-no answer to 08:38:26  
11 a straightforward question.

12 So I'll ask again. And if you could just  
13 answer, we can move on to the next question.

14 Do you need me to read back the question  
15 again? 08:38:41

16 A. So we talked about the -- you're using a  
17 phrase that -- "what do we have to lose." Do I  
18 recall using that specific phrase with  
19 Mr. Archibong, I don't recall using that specific  
20 phrase in that conversation with him. 08:38:53

21 But I do recall we talked about his  
22 understanding of the discussions at the time as to  
23 the impact on Facebook and third-party developers  
24 of the changes, which would encompass things that  
25 the company might have to deal with and the value 08:39:16

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1 that the company might lose. 08:39:22

2 Q. And, again, so the record is clear, you  
3 did not talk to him specifically about this  
4 PowerPoint, correct?

5 A. I did not talk to Mr. Archibong 08:39:30  
6 specifically about this PowerPoint. But we -- we  
7 talked about the general topics contained within  
8 which was important for me to help prepare myself  
9 for -- for today's testimony.

10 Q. Now for a PowerPoint -- for a PowerPoint 08:39:43  
11 like this, would that have been a formal task or  
12 Quip generated in connection with the project?

13 MR. SCHWING: Object to form. Outside  
14 the scope.

15 THE DEPONENT: Yeah, I can't say exactly 08:39:58  
16 what the -- the partnerships team would have  
17 operated at this time and whether or not they'd  
18 have other documentation. Typically somebody  
19 would -- would be asked to work on something and  
20 work on it. I'm not able to say whether or not in 08:40:18  
21 this case there were other tasks and documents.

22 Q. (By Mr. Loeser) Did you search for a  
23 formal task generated in connection with this  
24 project?

25 A. I did not search for a task in 08:40:39

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1 relationship to this specific deck. 08:40:41

2 Q. How about a Quip?

3 A. I did not search for a Quip relating to  
4 this specific deck either.

5 Q. And were you able to determine what, if 08:40:57  
6 anything, was done with this evaluation that's  
7 contained in this PowerPoint by Facebook?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: In talking to the -- to  
10 the people involved, my understanding is that 08:41:16  
11 this -- this PowerPoint does not -- was -- did not  
12 go on to be used to determine which apps should or  
13 should not be whitelisted.

14 Q. (By Mr. Loeser) And yet you didn't talk  
15 about the PowerPoint specifically with anyone that 08:41:33  
16 you talked to to prepare for your testimony, right?

17 MR. SCHWING: Object to form.

18 THE DEPONENT: I spoke to Mr. Archibong  
19 about his recollection around the time and how  
20 decisions were made, and he does not recall a 08:41:52  
21 formal framework being used ultimately to make --  
22 make decisions.

23 Q. (By Mr. Loeser) You didn't say  
24 Mr. Archibong, have you seen this PowerPoint  
25 before, right? 08:42:08

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1 MR. SCHWING: Asked and answered. 08:42:15

2 THE DEPONENT: As I said, I did not show  
3 this PowerPoint to -- to Mr. Archibong.

4 Q. (By Mr. Loeser) You didn't say  
5 Mr. Archibong, what do you think about the analysis 08:42:22  
6 that's contained in the PowerPoint, right?

7 A. Me and Mr. Archibong talked about how,  
8 his recollection of how decisions were made and  
9 ultimately what considers -- and what factors and  
10 considerations were -- were included. I -- I did 08:42:45  
11 not specifically show him this PowerPoint.

12 Q. Mr. Cross, isn't it a fact that Facebook  
13 treated certain developers specially based on their  
14 value to Facebook and ad spend?

15 MR. SCHWING: Object to form. 08:43:07

16 THE DEPONENT: It's true that Facebook  
17 whitelisted certain apps for having access to  
18 additional information. But I'm -- I'm not aware  
19 of -- in terms of the friends' information whether  
20 or not that was in any way related to -- to 08:43:34  
21 ad spend.

22 Q. (By Mr. Loeser) And so you don't know  
23 one way or the other?

24 MR. SCHWING: Object to form.

25 THE DEPONENT: Sorry, I'm not sure I 08:43:46

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1 understand. 08:43:48

2 Q. (By Mr. Loeser) So you don't know if, in  
3 fact, certain developers were treated specially  
4 based on their value to Facebook and ad spend,  
5 right? 08:43:59

6 MR. SCHWING: Object to form.

7 THE DEPONENT: Are you talking to the  
8 people involved in terms of apps that were  
9 whitelisted for extensions or exemptions to API  
10 version 1, there was -- from the people I've spoken 08:44:15  
11 to, there is nothing about their impact on ad spend  
12 that was involved in the decision to whitelist  
13 them.

14 Q. (By Mr. Loeser) And is that a question  
15 that you asked? 08:44:34

16 A. Yes, I asked people whether or not they  
17 recall revenue being involved in the ultimate  
18 decision to whitelist apps for access to friend  
19 data, and I was not able -- everybody suggested to  
20 me that -- that I spoke to that that was not the 08:44:56  
21 case.

22 Q. And the people that you spoke to are  
23 Ime Archibong and who else?

24 A. I spoke to Ime Archibong. I spoke to  
25 Francisco Varela, and a number of other people 08:45:20

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1 whose -- whose names in relation to this, I can't 08:45:26  
2 recall right now.

3 Q. And did you ask them if ad spend was  
4 taken into the account in the decision to whitelist  
5 any partners? 08:45:35

6 A. Yes, my understanding is that from --  
7 from the people I spoke to, ad spend was -- was not  
8 taken into account in a decision to whitelist  
9 anyone for an extension to -- or exemption from  
10 the -- the changes in API version 1 to 2 with 08:45:56  
11 respect to friends data.

12 Q. And who specifically told you ad spend  
13 wasn't taken into account?

14 A. Mr. Archibong talked to me about ad spend  
15 not being a deciding factor. I'm sorry, he was one 08:46:17  
16 of people who said that.

17 Q. And you said "deciding factor."  
18 Does that mean the same thing to you as  
19 taken into account?

20 A. Yes, that would mean the same thing to me 08:46:34  
21 as taken into account in terms of the ultimate  
22 decision to grant access.

23 Q. And have you examined the number of  
24 whitelisting partners that had significant ad spend  
25 on the Facebook platform? 08:46:52

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1 MR. SCHWING: Object to form. 08:46:55

2 THE DEPONENT: I'm not sure what you mean  
3 by partners who have significant ad spend on the  
4 Facebook platform.

5 Q. (By Mr. Loeser) Okay. How would you 08:47:08  
6 describe partners paying money to Facebook for  
7 advertising on the platform?

8 MR. SCHWING: Object to form.

9 THE DEPONENT: So companies often buy ads  
10 with Facebook, and that's handled by the -- the 08:47:28  
11 advertising arm of the business. So I think that's  
12 what we mean...

13 Q. (By Mr. Loeser) Okay. And has Facebook  
14 examined the number of whitelisted partners that  
15 paid money to Facebook for advertising on the 08:47:45  
16 Facebook platform?

17 MR. SCHWING: Object to form.

18 THE DEPONENT: I mean, many organizations  
19 spend -- spend money with Facebook on -- in some  
20 way. So I'm kind of -- I'm not entirely sure how 08:48:04  
21 to answer the question.

22 Q. (By Mr. Loeser) Well, let me ask it  
23 again. And I -- it's -- I'm trying to ask you a  
24 very straightforward simple question, which is just  
25 if Facebook has examined the number of whitelisted 08:48:13

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1 partners that paid money to Facebook to advertise 08:48:20  
2 on the Facebook platform, is that an examination  
3 that Facebook has conducted?

4 MR. SCHWING: Vague.

5 THE DEPONENT: I'm not aware of -- of a 08:48:35  
6 specific evaluation that was done with respect to  
7 whitelisting parties and ad spend.

8 Q. (By Mr. Loeser) Is that an evaluation  
9 that Facebook is capability of doing?

10 MR. SCHWING: Object to form. Outside 08:48:56  
11 the scope.

12 THE DEPONENT: I don't know exactly how  
13 our -- our advertising systems work. I -- I'm not  
14 sure -- I wouldn't be able to confirm if that's  
15 something Facebook would be able to do. 08:49:10

16 Q. (By Mr. Loeser) Who would you ask to  
17 find out if that's an analysis that Facebook was  
18 capable of doing?

19 A. Again, I'm not entirely clear on the --  
20 the analysis that -- that was suggesting could be 08:49:36  
21 done. So it's hard for me to suggest what I would  
22 do next. This is relatively vague in terms of,  
23 like, the time and objectives that we were  
24 suggesting.

25 Q. Does Facebook keep track of the amount of 08:50:03

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1 money that its partners pay to Facebook? 08:50:05

2 MR. SCHWING: Outside of the scope.

3 THE DEPONENT: Can you help me understand

4 by what you mean by "partners and pay," in what

5 context? 08:50:23

6 Q. (By Mr. Loeser) In the context of the

7 conversation we're having about whitelisted

8 partners. And, again, I'm just trying to sort out

9 what Facebook is capable of identifying.

10 So tell me if I'm wrong. Facebook keeps 08:50:34

11 track of money received from any partners,

12 including its whitelisted partners, right?

13 A. Again, Facebook keeps -- Facebook will

14 track revenue spent on ads by -- by corporations

15 and companies and -- and entities. So that's part 08:50:57

16 of the standards -- Facebook's standards --

17 standard business practices for running an ad

18 system.

19 By "partners," I assume you mean entities

20 that Facebook worked with as part of the Facebook 08:51:14

21 developer platform. And so if -- if that's what

22 you mean -- well, first of all is that what you

23 mean?

24 Q. Here's what I mean. Facebook has

25 identified all of the apps and partners that it 08:51:30

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1 whitelisted for access to friend data, right. We 08:51:34  
2 went through that the other day.

3 A. Yes, Facebook has -- has enacted an  
4 exhaustive effort to identify apps and partners  
5 that were whitelisted for access to friend data. 08:51:47

6 Q. So what would Facebook need to do to also  
7 identify for those very same entities the revenue  
8 spent on ads on the Facebook platform?

9 MR. SCHWING: Outside the scope. Object  
10 to form. 08:52:04

11 THE DEPONENT: Again, in that context,  
12 it's hard for me to know exactly what -- what  
13 Facebook would do. Apart from the -- but the  
14 conversation with the -- between the -- the teams  
15 that run the Facebook advertising business and the 08:52:25  
16 teams that maintain the Facebook developer  
17 platform.

18 Q. (By Mr. Loeser) Before 2018, did  
19 Facebook have a comprehensive list of all app  
20 capability pairs that it had granted? 08:52:40

21 A. [REDACTED]

[REDACTED]

[REDACTED]

24 Q. And how was that maintained before 2018?

25 A. That was maintained through the 08:53:03

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1 capabilities tool. 08:53:05

2 Q. And before 2018, did Facebook  
3 systematically track which capabilities emitted  
4 user data and which third parties had access to  
5 that data? 08:53:17

6 MR. SCHWING: Compound.

7 THE DEPONENT: The capabilities tool [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 Q. (By Mr. Loeser) And when you say "at 08:53:39  
11 that time," what was the time -- you're saying  
12 prior to 2018 the capability tool [REDACTED]

13 [REDACTED] is that right?

14 MR. SCHWING: Vague.

15 THE DEPONENT: I think -- sorry, Austin. 08:53:52

16 MR. SCHWING: I said objection. Vague.

17 Go ahead and answer, if you're able to.

18 THE DEPONENT: Prior to I think 2018 when

19 that specific field was introduced into the

20 capability tool, [REDACTED] to 08:54:10

21 identify which capabilities had [REDACTED]

22 [REDACTED]

23 Q. (By Mr. Loeser) Before 2018 did Facebook  
24 have a formalized process for requirements for  
25 determining which third parties would receive 08:54:29

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1 certain capabilities? 08:54:32

2 A. There was a process by which a capability  
3 would be granted to an application which was  
4 standard at the time.

5 Q. And what was that process? 08:54:53

6 A. [REDACTED] that  
7 the capability [REDACTED] and then  
8 another [REDACTED]

9 [REDACTED]

10 Q. And this was -- was this a written 08:55:09  
11 process, a formal process?

12 A. That mechanism was -- was instituted by  
13 the way the capability tool worked. I wouldn't say  
14 it was a written process.

15 Q. And when you say [REDACTED] [REDACTED]

16 [REDACTED]

17 What [REDACTED]

18 and wh [REDACTED]

19 MR. SCHWING: Object to form.

20 THE DEPONENT: My understanding at the 08:55:45  
21 time, is technically [REDACTED]

22 [REDACTED] d to an app. And then a [REDACTED]

23 [REDACTED] had the ability to -- [REDACTED]

24 [REDACTED]

25 Q. (By Mr. Loeser) And who were the [REDACTED] 08:56:01

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1 [REDACTED] who could [REDACTED]? 08:56:02

2 A. I'm not sure which people at which times  
3 had -- had that -- had those -- had that power.

4 Q. What were their positions?

5 A. Again, the -- the positions of the people 08:56:25  
6 in terms of their job titles would have varied  
7 depending on which specific people had that -- had  
8 that ability at the time. So it's hard for me to  
9 say.

10 Q. And when a -- when a certain capability 08:56:42  
11 was made available, was there a written report or  
12 record of the reason why the capability was made  
13 available?

14 A. The capability tool includes a  
15 [REDACTED] -- of most capabilities which 08:57:08  
16 [REDACTED]

17 Q. And when did it -- when did the tool  
18 start including that [REDACTED]

19 A. The [REDACTED] as I understand it  
20 [REDACTED] 08:57:29  
21 but not every capability would have -- would have  
22 had a -- necessarily [REDACTED] for.

23 Q. Previously you indicated you were not  
24 prepared to testify on when, if ever, Facebook  
25 deprecated all APIs that emit friend data. 08:57:51

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1 Do you remember that testimony? 08:57:55

2 MR. SCHWING: Object to form.

3 THE DEPONENT: I don't recall  
4 specifically saying that, I'm afraid. But...

5 Q. (By Mr. Loeser) Can you testify as to 08:58:12  
6 when, if ever, Facebook deprecated all APIs that  
7 emit friend data?

8 A. I can talk through the processes that  
9 Facebook has gone through since 2018 to  
10 dramatically limit the amount of information made 08:58:32  
11 available to third-party apps.

12 Q. And you've done that. And my question is  
13 a little different than that.

14 And, again, I -- I'm asking you again  
15 because of some correspondence with your counsel 08:58:48  
16 which seems to suggest that this is a question that  
17 you can answer, or that it would be difficult to  
18 answer, or that you might be able to answer, I just  
19 want to drill down and figure out if you can -- if  
20 you can answer it or not. 08:58:59

21 Can you identify when, if ever, Facebook  
22 deprecated all APIs that emit friend data?

23 MR. SCHWING: Object to form.

24 Go ahead, Mr. Cross.

25 THE DEPONENT: Yes, I have -- speaking to 08:59:14

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1 people involved I've identified the -- the APIs 08:59:16  
2 that emit friend data, and I understand when they  
3 were deprecated and when third-party apps were  
4 removed from the whitelists relating to those APIs.

5 Q. (By Mr. Loeser) Okay. And has -- we 08:59:37  
6 talked about a number of APIs that you had  
7 previously indicated continue to emit friend data  
8 after 2018. And can you -- can you tell me as to  
9 those APIs, has Facebook, in fact, deprecated them  
10 at this point so that they no longer emit friend 08:59:52  
11 data?

12 A. Yes, I can. So the -- the first master  
13 in here is in [REDACTED], when the friend  
14 permissions were deprecated and removed, such that  
15 they had no effect for any app regardless of any 09:00:12  
16 whitelist they were on. And so that happened the  
17 last day that -- those permissions had any effect  
18 was the -- was the [REDACTED]

19 Q. Okay. And what about the other APIs that  
20 we talked about that -- that also emit friend data. 09:00:34

21 Do you remember what those were?

22 A. I can give some examples of -- of APIs I  
23 think are pertinent here. So the two others that  
24 we talked about previously were the invitable and  
25 tagable friends APIs. Those were changed on the -- 09:00:51

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1 the [REDACTED] at -- such that regardless 09:00:57  
2 of -- of any whitelist as I understand it, those  
3 APIs would return no information.

4 MR. SCHWING: Sorry, Mr. Loeser you're on  
5 mute. 09:01:32

6 MR. LOESER: Sorry.

7 Q. (By Mr. Loeser) You identified inevitable  
8 friends and tagable friends, and we -- we talked  
9 about a number of other APIs that you also  
10 testified emit friend data, including events and 09:01:39  
11 groups and user posts, user photos and so on.

12 As to all those other APIs that you  
13 previously identified, has Facebook deprecated all  
14 of them as well at this point?

15 A. Yes, my understanding is that the -- the 09:01:59  
16 ability for an app to read likes and comments by  
17 friends on a users own photos is also no longer  
18 available.

19 Q. And when was that deprecated?

20 A. At the -- the -- the deprecation took 09:02:25  
21 place on the -- the [REDACTED] as I understand it

22 [REDACTED]

23 Q. Okay. And the other APIs that you talked  
24 about?

25 A. So the groups API was updated in -- [REDACTED] 09:02:42

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1 [REDACTED]. Particularly on the [REDACTED], such that 09:02:47  
2 a new permission was required for apps to access  
3 the profile information of somebody who had posted  
4 in a group and, that change rolled out soon after  
5 that. 09:03:13

6 Q. And when you say the "[REDACTED]" of what  
7 year?

8 A. Oh, sorry, my understanding is that  
9 permission was announced and those changes made on  
10 the [REDACTED] 09:03:23

11 Q. And how about private API capabilities  
12 that emit friend data, have those all now been  
13 deprecated?

14 A. So the first thing to say is the -- the  
15 change to the friend permissions on the [REDACTED] 09:03:44  
16 [REDACTED] would have effected all apps regardless  
17 of white- -- whitelisting specifically with regard  
18 to the friend permissions. So the friend  
19 permissions private or public had no effect for any  
20 app after the [REDACTED]. 09:04:05

21 Q. Okay. And is there any other way other  
22 than friend permissions that private API  
23 capabilities would emit friend data?

24 A. So one other way is access to the  
25 newsfeed API, which we talked about previously, 09:04:23

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1 read stream. My understanding is that the -- the 09:04:26  
2 final app was removed, the final third-party app  
3 was removed from that whitelist in [REDACTED]  
4 Q. And when you say "the final app in  
5 [REDACTED] what was the final app, do you know? 09:04:50  
6 A. My understanding is the last app to be  
7 removed was Tobii, T-O-B-I-I, which was an  
8 accessibility app for people with ALS.  
9 Q. And how about between March of 2018 and  
10 [REDACTED], how many apps or partners continued 09:05:06  
11 to have access to those capabilities during that  
12 timeframe, do you know that?  
13 A. The process to wind down partner  
14 integrations began in April 2018 and continued over  
15 2018 and early 2019. Exactly I can't remember the 09:05:29  
16 exact numbers of -- of which apps were -- were  
17 included. But my understanding is that that  
18 program or the whitelisting program was wound down  
19 probably by the [REDACTED].  
20 Q. And, Mr. Cross, are there any other ways 09:05:53  
21 that friend data is emitted by Facebook other than  
22 those that you've described that are ongoing?  
23 A. The answer to that question is -- is a  
24 little complicated depending on the precise --  
25 precise definition of -- of friend data. 09:06:14

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1 And so -- so that makes it hard to answer 09:06:17  
2 your question in -- in the affirmative.

3 Q. Okay. Well, what are the ways in which  
4 friend data is still emitted? And if to answer  
5 that question you have to explain what friend data 09:06:38  
6 means in that context, please do so.

7 A. So using the definition of -- of friend  
8 data which is information -- somebody else's  
9 information which a user emits or could emit to a  
10 third-party application by nature of them being a 09:07:01  
11 friend, my understanding is that Facebook has  
12 removed all the ways in which a users friends data  
13 would be emitted to a third-party app to the nature  
14 of them being a friend.

15 Q. Okay. And you said that your answer 09:07:25  
16 "depended on how you define friend data."

17 So is there another definition of friend  
18 data that you have in mind which if applied would  
19 lead you to testify that friend data continues to  
20 be emitted now? 09:07:40

21 A. Again, it's -- it depends what you mean  
22 by what's meant by friend data. What I'm referring  
23 to here is information that's posted or entered by  
24 a users friend, which would be emitted by the  
25 nature of them being a friend to a third party. 09:08:08

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1 Q. And, again, I'm just trying to understand 09:08:20  
2 your earlier testimony.

3 So is there some other type of friend  
4 data that continues to be emitted today?

5 A. For example, if I managed a page and I 09:08:37  
6 had an app managing my page, and one of my friends  
7 posted publicly on that page, it's possible that an  
8 app would have access to that public content.

9 So that's the example of -- of  
10 information that's about a friend which might be 09:09:03  
11 emitted.

12 Q. Can you think of any other examples?

13 A. That's really the -- the example I can  
14 think of.

15 Q. Mr. Cross, I asked you previously about 09:09:22  
16 the factors that led Facebook to deprecate APIs  
17 that emit friend data after the Cambridge Analytica  
18 scandal, and you were not prepared at the time to  
19 testify; however, I understand that you are now  
20 able to testify to that. If I -- if I understand 09:09:36  
21 that correctly, could answer that question?

22 MR. SCHWING: Object to the form of the  
23 question.

24 Derek, I hesitate here, but let me just  
25 try to be helpful. And in the interest -- I 09:09:58

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1 just -- if -- if you can just ask him the question 09:10:02  
2 as opposed to --  
3 MR. LOESER: Sure. Sure.  
4 MR. SCHWING: -- having representations  
5 of counsel that's my problem with it, okay. 09:10:05  
6 MR. LOESER: Yeah, and I appreciate that.  
7 And I'm not trying to pick a fight with you. I was  
8 just trying to make sure that --  
9 MR. SCHWING: Yeah. No, I --  
10 MR. LOESER: I'm not trying to ask him 09:10:14  
11 questions that he's not able to answer. I'm trying  
12 to --  
13 MR. SCHWING: Yeah.  
14 MR. LOESER: -- ask questions now which  
15 he is able to answer based on our communications. 09:10:17  
16 Q. (By Mr. Loeser) So let me just ask  
17 again.  
18 Mr. Cross, what are the factors that led  
19 Facebook to deprecate APIs that emit friend data  
20 after the Cambridge Analytica scandal? 09:10:28  
21 A. In 2018 following the situation around  
22 Cambridge Analytica, the company [REDACTED]  
[REDACTED]  
24 A number of the reasons why some of those  
25 partnerships had built -- had been built, for 09:10:55

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1 example, the device integrations. They were built 09:10:57  
2 in a -- in a world where there were many more  
3 mobile operating systems out there. By 2018 most  
4 people were using iOS and Android.

5 And there were concerns raised around the 09:11:20  
6 Cambridge Analytica situation that indicated that  
7 there were concerns with how information was shared  
8 with third parties. And Facebook under --

9 [REDACTED] as to  
10 whether or not [REDACTED]. 09:11:45

11 Q. Mr. Cross, was it wrong for Facebook to  
12 publicly state it was getting rid of apps ability  
13 to get Facebook user data from users friends when,  
14 in fact, it continued to allow a number of apps to  
15 do just that? 09:12:05

16 MR. SCHWING: Lacks foundation. Vague.  
17 Outside of the scope of the deposition.

18 THE DEPONENT: I'm not aware of  
19 statements that were made -- statements that  
20 Facebook has made to -- to that effect. 09:12:22

21 Q. (By Mr. Loeser) Respectfully, Mr. Cross,  
22 that's not the question I asked you.

23 So I'll ask the question again, and if  
24 you can answer the question, I would appreciate it.

25 Was it wrong for Facebook to publicly 09:12:37

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1 state it was getting rid of apps ability to get 09:12:39  
2 Facebook user data from users friends when, in  
3 fact, Facebook continued to allow a number of apps  
4 to do just that?

5 MR. SCHWING: Outside of the topics of 6 09:12:53  
6 and 7.

7 THE DEPONENT: Again, I'm not aware of --  
8 of a statement that -- that Facebook's made to --  
9 that would indicate Facebook believes that that's  
10 the case. 09:13:07

11 Q. (By Mr. Loeser) Mr. Cross, I'm not  
12 asking you if you're aware of the statement  
13 Facebook has made. I'm asking you as Facebook's  
14 corporate designee, whether it was wrong for  
15 Facebook to publicly state it was getting rid of 09:13:17  
16 apps ability to get Facebook user data from the  
17 users friends when, in fact, Facebook continued to  
18 allow a number of apps to do just that?

19 MR. SCHWING: Vague. Lacks foundation.  
20 Outside the scope of the definition. 09:13:32

21 THE DEPONENT: I -- I -- I'm afraid, I  
22 don't work in -- in corporate communications, and  
23 so I'm not an expert in what statements Facebook  
24 made or should have made around -- around this  
25 time. As I said, I'm not aware of statements that 09:13:52

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1 Facebook has made to indicate that. 09:14:00

2 Q. (By Mr. Loeser) And, Mr. Cross, are you  
3 unable to testify as Facebook's corporate designee  
4 as to whether it was wrong for Facebook to state it  
5 was getting rid of apps ability to get Facebook 09:14:11  
6 user data from a users friends when, in fact,  
7 Facebook continued to allow a number of apps to do  
8 just that?

9 MR. SCHWING: Outside of the scope of  
10 topics 6 and 7. And lacks foundation. 09:14:24

11 THE DEPONENT: As I said like -- I'm  
12 not -- I don't feel comfortable giving an answer on  
13 behalf of the company there. I've given -- I'm not  
14 an expert in, or I'm not really working in  
15 corporate communications or -- really have the 09:14:46  
16 expertise required to -- to answer that question  
17 like that, I'm afraid.

18 Q. (By Mr. Loeser) Mr. Cross, you testified  
19 that one reason Facebook gave third parties access  
20 to friend information after 2014 was to avoid 09:15:07  
21 breaking the user experience, right?

22 MR. SCHWING: Object to form.

23 THE DEPONENT: I recall we -- we were  
24 discussing the -- the reasons for giving some apps  
25 additional time to migrate between API version 1 09:15:28

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1 and version 2. 09:15:33

2 Q. (By Mr. Loeser) So that the user  
3 experience will not be broken?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: My understanding is -- 09:15:39

6 sorry. My understand is that's one of the reasons  
7 why Facebook allowed apps extra time to transition  
8 from version 1 to version 2.

9 Q. (By Mr. Loeser) So for third parties who  
10 received friend information after 2014, their user 09:15:56  
11 experience was not broken, right?

12 MR. SCHWING: Object to form.

13 THE DEPONENT: So I'm not -- I'm not sure  
14 I understand the question since -- can you -- I'm  
15 not sure I understand the question. 09:16:13

16 Q. (By Mr. Loeser) You understand what it  
17 means to break the user experience, right?

18 A. Different applications behave in  
19 different ways when the API is -- is changed for  
20 them. 09:16:28

21 Q. And APIs that -- that apps that depend on  
22 friend information if the friend information no  
23 longer is available that breaks the user  
24 experience, right?

25 A. It could break the user experience. 09:16:41

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1 Again, the precise way in which the application was 09:16:43  
2 effected would be different from application to  
3 application.

4 Q. Okay. But for an app that depends upon  
5 friend data, if that app was continued to 09:16:53  
6 allowed -- continued to have access to friend data,  
7 than the user experience would not be broken,  
8 right?

9 MR. SCHWING: Object to form.

10 THE DEPONENT: Typically where an app is 09:17:08  
11 built to work with a particular version of an -- or  
12 a particular way an API works and then that API  
13 doesn't change, then the behavior of the app also  
14 would not change.

15 Q. (By Mr. Loeser) Okay. And there were 09:17:23  
16 many third-party applications who before 2015  
17 relied on nonapp friend information for their user  
18 experience, right?

19 A. There were applications built prior --  
20 prior to 2014 which reviewed friends information in 09:17:41  
21 various ways.

22 Q. And not just various ways but for the  
23 user experience, right?

24 A. Some apps would have used that  
25 information very much in the user experience. 09:18:01

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1 Q. Mr. Cross, not all those third parties 09:18:04  
2 received an extension or access to a private API,  
3 right?

4 A. Facebook gave developers a year to  
5 transition from API version 1 to version 2. 09:18:20

6 Q. Okay. And not all apps received  
7 extensions beyond that time period, right?

8 A. Not all apps were -- were given  
9 additional time to migrate.

10 Q. And so for those apps that relied on 09:18:36  
11 friend information for the user experience that did  
12 not receive an extension beyond a year, the -- the  
13 user experience was broken for those apps, right?

14 MR. SCHWING: Object to form.

15 THE DEPONENT: I don't think that's an 09:18:59  
16 appropriate characterization to make. Many  
17 developers updated their application, such that it  
18 continued to -- to operate.

19 Q. (By Mr. Loeser) But for those that  
20 depended on the same nonapp friend information that 09:19:15  
21 they got before the transition to the new platform,  
22 the user experience was broken for those apps,  
23 right?

24 MR. SCHWING: Object to form.

25 THE DEPONENT: No, I don't think that's 09:19:31



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1 an appropriate characterization to make. Apps -- 09:19:33  
2 developers were in many cases up -- able to update  
3 their application such that it did not rely on  
4 access to that information.

5 Q. (By Mr. Loeser) So there were no apps 09:19:49  
6 for which the user experience was broken as a  
7 result of not providing the app with private API  
8 for that information?

9 MR. SCHWING: Object to form.

10 THE DEPONENT: That's also not quite what 09:20:04  
11 I said. I said that many -- many developers were  
12 able to update their application. Others choose  
13 to -- chose to stop offering their application.

14 And there would have been some developers who did  
15 none of those things. And their application would 09:20:19  
16 behave in different ways depending on exactly how  
17 their application was built.

18 Q. (By Mr. Loeser) So how did Facebook  
19 decide which user experiences to break and which  
20 user experiences not to break when it came to 09:20:31  
21 providing friend sharing extensions?

22 MR. SCHWING: Object to form.

23 THE DEPONENT: Facebook evaluated -- the  
24 partnerships team at Facebook along with the -- the  
25 work team, evaluated whether or not it was 09:20:51

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1 appropriate to grant an extension typically based 09:20:59  
2 on whether or not the developer had the -- the  
3 ability -- had been able to update their  
4 integration in time, and whether or not more time  
5 would prevent a broken user experience. 09:21:17

6 Q. (By Mr. Loeser) Mr. Cross, have you been  
7 able to figure out what a "T0" partner is?

8 A. My understanding is that T0 represents a  
9 categorization by the partnerships team of certain  
10 partners of app developers. 09:22:02

11 Q. And, Mr. Cross, how many T0 partners were  
12 whitelisted for friend data access after 2014?

13 A. I don't know exactly which apps were  
14 categorized as T0 partners or -- or which of them  
15 continued to have the access for -- for some period 09:22:23  
16 of time.

17 Q. That's information that Facebook  
18 possesses, right?

19 MR. SCHWING: Object to form.

20 THE DEPONENT: I don't know whether or 09:22:34  
21 not apps categorized this -- this -- well,  
22 developers categorized this -- this T0 as -- as  
23 something that Facebook still has access to.

24 Q. (By Mr. Loeser) Any reason for you to  
25 believe that Facebook cannot identify all of its T0 09:22:54

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1 partners from 2007 to present? 09:22:57

2 MR. SCHWING: Object to form.

3 THE DEPONENT: I'm just not sure what

4 the -- how -- how lists of what would be considered

5 T0 partners were -- were kept at various times, in 09:23:11

6 the concept of T0 is not something that's existed

7 from 2007 onwards.

8 Sorry, consistently existed from 2007

9 onwards.

10 Q. (By Mr. Loeser) Mr. Cross, does 09:23:30

11 Jackie Chang still work for Facebook?

12 A. I'm -- I think she may still work for

13 Facebook but is on maternity leave.

14 Q. And to prepare for your testimony

15 regarding friend sharing and whitelisting, did you 09:23:46

16 speak with Jackie Chang?

17 A. I did not speak with Jackie Chang. As I

18 understand she's -- she's currently on leave.

19 Q. Is that the reason why you didn't try to

20 speak with her? 09:24:02

21 A. Typically if someone is on leave, I would

22 generally like to leave them on leave.

23 Q. And do you know when she returns from

24 leave?

25 A. I -- I'm not sure when she returns from 09:24:19

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1 leave, I'm afraid. 09:24:22

2 MR. LOESER: Why don't we go off the  
3 record.

4 THE VIDEOGRAPHER: Okay. We're off the  
5 record. It's 9:24 p.m. 09:24:38

6 (Recess taken.)

7 THE VIDEOGRAPHER: We're back on the  
8 record. It's 9:34 p.m.

9 EXAMINATION

10 BY MR. SCHWING: 09:34:07

11 Q. Mr. Cross, I just have a couple of  
12 follow-up questions. Earlier you gave some  
13 testimony regarding site bar in the gatekeeper  
14 tool, and you indicated that there was some  
15 migration information into the capabilities tool. 09:34:19

16 Do you remember that testimony?

17 A. Yes, I recall being asked.

18 Q. Can you explain further the migration  
19 that took place then?

20 A. So my understanding is that -- between 09:34:37  
21 2018 and '19 an effort was undertook to migrate any  
22 site bars or gatekeepers which refied to the API  
23 behavior for a [REDACTED], or [REDACTED] was  
24 migrated into the capability tool and all relevant  
25 information was -- was -- was also migrated. 09:35:06

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1                   Such that today, my understanding is the                   09:35:09  
2                   capability tool is a complete picture of ways in  
3                   which apps access to information by the API has  
4                   not -- has been managed.

5                   Q.    Were third parties whitelisted for friend                   09:35:43  
6                   information because of the revenue that they  
7                   deliver to Facebook?

8                   A.    No.

9                   Q.    Are third parties whitelisted for friend  
10                  information because of their advertising spend?                   09:35:58

11                  A.    No.

12                  MR. SCHWING: I don't have anything  
13                  further.

14                  MR. LOESER: Brief follow up.

15                               FURTHER EXAMINATION                               09:36:10  
16                  BY MR. LOESER:

17                  Q.    You referred to an effort to migrate, was  
18                  it site bar -- what was migrated from what to what?

19                  A.    So the gatekeeper tool contained a number  
20                  of gatekeepers, which we used to [REDACTED]                   09:36:32  
21                  [REDACTED] and --  
22                  where Facebook uncovered or identified -- sorry,  
23                  where Facebook identified gatekeepers that were  
24                  based on an [REDACTED] then that gatekeeper was  
25                  migrated to be a capability.                               09:36:58

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1 Q. And what prompted that migration? 09:37:00

2 A. A desire to have a single tool to manage  
3 all of the ways in which the API behavior could be  
4 modified.

5 Q. Now, Mr. Cross, in response to 09:37:37  
6 Mr. Schwing's question about revenue, you've  
7 testified that partners were not whitelisted for  
8 friend data because the revenue they deliver to  
9 Facebook.

10 Is that your testimony as Facebook's 09:37:56  
11 corporate designee?

12 A. My understanding from reviewing documents  
13 and speaking to people, is the revenue or ad spend  
14 was not a determining factor as to whether or not  
15 an app was granted access to friends data. 09:38:15

16 Q. And the basis of your knowledge there,  
17 that's not based on your personal knowledge is it?

18 A. I certainly have no personal knowledge  
19 of -- sorry. Let me put that another way.

20 In my experiences, I'm -- I was not aware 09:38:36  
21 of anytime revenue was used to make a whitelisting  
22 decision with regards to friends data, and the  
23 people I spoke to in -- in preparation for this  
24 testimony also concurred with that view.

25 Q. And those people you spoke to are two 09:39:04

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1 individuals that you identified before Mr. Mehta 09:39:06  
2 and Mr. Archibong; is that right?

3 MR. SCHWING: Misstates testimony.

4 THE DEPONENT: Those are two of the  
5 people that I spoke to in preparation for today. 09:39:17

6 Q. (By Mr. Loeser) And is there anybody  
7 else that told you that ad spend and revenue was  
8 not taken into account by Facebook when deciding  
9 which partners to whitelist?

10 A. I can't recall the names of all the other 09:39:35  
11 people I spoke to in -- in preparation for this,  
12 but all the people I spoke to, and of all the  
13 documents I reviewed, concurs with the -- the  
14 understanding that revenue was not taken into  
15 account with regards to whitelisting apps to friend 09:39:58  
16 information.

17 Q. Now, Mr. Cross, we went through many,  
18 many documents that suggest to the contrary, didn't  
19 we?

20 MR. SCHWING: Argumentative. Lacks 09:40:11  
21 foundation.

22 Q. (By Mr. Loeser) Isn't that true,  
23 Mr. Cross?

24 A. We've been through documents which --  
25 looked to assess the potential impact of the 09:40:25

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1 changes. And -- and some of those documents 09:40:27  
2 mentioned revenue as -- as part of the early  
3 assessments.

4 But when speaking to the people that were  
5 involved in native whitelisting, the revenue from 09:40:44  
6 these device integration partners were, or other  
7 platform partners, was not considered as part of  
8 the decision to -- to grant them access.

9 Q. And so you're saying that because these  
10 two individuals you talked to told you that? 09:41:07

11 MR. SCHWING: Object --

12 Q. (By Mr. Loeser) The documents certainly  
13 don't tell you that, do they?

14 MR. SCHWING: Argumentative. Lacks  
15 foundation. 09:41:17

16 THE DEPONENT: Speaking to people who  
17 were involved in -- in the decisions as to why apps  
18 ultimately were granted extensions or exemptions  
19 they -- the impact on -- on revenue from not doing  
20 so, was not an impact. Was not a factor in the 09:41:40  
21 decision-making.

22 Q. (By Mr. Loeser) Well, did you -- did you  
23 identify any internal documents at Facebook that  
24 said what you just said?

25 MR. SCHWING: Object to form. 09:41:56



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1 Q. (By Mr. Loeser) Any? Did you identify a 09:42:01  
2 single document that confirms what you just said?

3 MR. SCHWING: Same objection.

4 THE DEPONENT: I reviewed a number of  
5 documents. I -- I don't recall a document that -- 09:42:15  
6 that says exactly what I just said. Again,  
7 speaking to the -- the people involved and from my  
8 own experiences, involved in -- in this time in  
9 terms of giving apps -- giving partners continued  
10 access to -- to friend data for a period of time as 09:42:41  
11 an extension or exemption, the revenue from those  
12 partners was -- was not a factor in the  
13 decision-making as to whether or not to grant them  
14 full access.

15 Q. (By Mr. Loeser) Mr. Cross, can you 09:42:55  
16 identify even one document generated internally at  
17 Facebook that says that ad revenue, ad spend and  
18 revenue was not taken into account when deciding  
19 which partners to whitelist?

20 MR. SCHWING: Object to form. Asked and 09:43:15  
21 answered.

22 THE DEPONENT: I can't identify as I sit  
23 here a -- a document that --

24 SPECIAL MASTER GARRIE: Answer the  
25 question. Yes or no. It is a simple question, 09:43:26

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1 answer it accordingly. 09:43:33

2 THE DEPONENT: As I sit here today, I  
3 can't identify a document that -- that says that  
4 specifically.

5 Q. (By Mr. Loeser) Now, Mr. Cross, you say 09:43:46  
6 you talked to two individuals who told you that  
7 revenue and ad spend was not taken into account in  
8 whitelisting decisions.

9 Has it occurred to you that perhaps  
10 they're not telling you the truth? 09:43:56

11 MR. SCHWING: Object to form.

12 THE DEPONENT: I suppose -- the people I  
13 spoke in preparation for this deposition are people  
14 that were involved over -- over a long period of  
15 time in how Facebook manages its developer platform 09:44:21  
16 and platform partnerships.

17 These people are knowledgeable about  
18 their -- about their space and they were effusive  
19 in helping me understand their view on how  
20 whitelisting decisions were made. 09:44:43

21 And revenue was not considered in the  
22 ultimate decision to whitelist. The documents  
23 you're, I think referring to, for example,  
24 Ms. Mosseri is -- is a draft document. It was  
25 prepared when the company was attempting to 09:45:07

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1 understand the potential impact. And, you know, my 09:45:13  
2 understanding is that as a result, of my  
3 conversations, revenue was not a factor in deciding  
4 whether or not to grant apps continued access to  
5 friend data. 09:45:35

6 Q. (By Mr. Loeser) Mr. Cross, I asked you a  
7 very simple and straightforward question. Would  
8 you like me to read it back to you so that you can  
9 answer it? I'll ask it again.

10 Mr. Cross, you say, you talked to two 09:45:47  
11 individuals who told you that revenue and ad spend  
12 was not taken into account in whitelisting  
13 decisions.

14 Has it occurred to you that perhaps they  
15 are not telling you the truth? 09:45:58

16 MR. SCHWING: The question is  
17 argumentative.

18 THE DEPONENT: I have no reason --

19 SPECIAL MASTER GARRIE: Answer the  
20 question. 09:46:09

21 THE DEPONENT: I have no reason to doubt  
22 they were telling me the truth.

23 Q. (By Mr. Loeser) And, Mr. Cross, when you  
24 spoke to those two individuals, did you bring to  
25 their attention the series of documents that we 09:46:19

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1 sent over to you before your deposition that talked 09:46:22  
2 about the identification of strategic partners and  
3 the revenue received from them in whitelisting  
4 decisions?

5 A. And so I think the last of what you said 09:46:40  
6 there is -- is not -- I'm not sure I fully  
7 understand. We -- the -- I'm sorry. I -- that was  
8 about three things in that -- in that question  
9 which -- which I would like to unpick.

10 Can you ask me the question again, 09:46:58  
11 please.

12 Q. Mr. Cross, were you provided with any  
13 contemporaneous -- contemporaneous written record  
14 from the people you spoke to about the basis for  
15 whitelisting decisions that indicated that revenue 09:47:26  
16 and ad spend was not taken into account in making  
17 those decisions?

18 A. Was I provided with any  
19 contemporaneous -- like -- sorry. I'm -- I'm  
20 really -- I'm really just not sure I'm 09:47:45  
21 understanding that question.

22 Q. Okay. By "contemporaneous," I mean at  
23 the time the whitelisting decisions were made, were  
24 you provided with any written record from the time  
25 at which whitelisting decisions were made that 09:47:59

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1 indicated that ad revenue -- that ad spend and 09:48:01  
2 revenue was not taken into account in the  
3 whitelisting decisions?

4 MR. SCHWING: Object to form.

5 THE DEPONENT: I was not provided with -- 09:48:16  
6 with -- with documents that -- that state that  
7 ad revenue was not included in the decision-making.

8 Although my -- again, my conversations  
9 and the documents I've reviewed talk about what  
10 factors were included, it would not necessarily be 09:48:37  
11 normal for them to be explicit, that was not  
12 included.

13 Q. (By Mr. Loeser) And, Mr. Cross, when  
14 conducting your own investigation to determine if  
15 you had been told the truth, did you go find out 09:48:53  
16 how much money the whitelisted partners had paid to  
17 Facebook after 2014?

18 MR. SCHWING: Object to form.

19 THE DEPONENT: I, in preparation for this  
20 case, did not attempt to find out how much revenue 09:49:17  
21 these partners -- certain partners had paid  
22 Facebook over time. And because from my own  
23 observations in speaking to the people involved,  
24 the decisions to whitelist were based on the desire  
25 to keep valuable integrations running and to 09:49:42

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1 minimize broken experiences for widely used apps, 09:49:51  
2 and to give developers, some developers additional  
3 time to migrate.

4 In -- in none of that -- none of those in  
5 the documents that I reviewed about the time in 09:50:08  
6 terms of whitelisting decisions, was -- was revenue  
7 mentioned in relation to friend data.

8 Q. (By Mr. Loeser) Mr. Cross, I'm going to  
9 ask you one more time. And I would like a  
10 yes-or-no answer to a yes-or-no question. 09:50:24

11 And then we can be finished for the  
12 night.

13 In conducting your own investigation to  
14 determine if you had been told the truth, did you  
15 go find out how much money the whitelisted partners 09:50:34  
16 had paid to Facebook after 2014, yes or no?

17 MR. SCHWING: Argumentative.

18 THE DEPONENT: No, I did not conduct an  
19 investigation into how much money those partners  
20 had spent on ad revenue. 09:51:00

21 MR. LOESER: Thank you. Those are the  
22 questions I have.

23 Just noting for the record, Mr. Schwing,  
24 we do have concerns about the ability of the  
25 witness to testify as to certain topics. I won't 09:51:14

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1 take anymore of his time right now on the record. 09:51:17

2 We can talk about that later, but obviously reserve  
3 the right based on our ongoing conversations to --  
4 to have more questions of perhaps another witness.

5 But I appreciate Mr. Cross's time. I 09:51:29  
6 know this has been a -- a long deposition, and  
7 thank you very much for your willingness to  
8 participate. And that's all I have for the night.

9 MR. SCHWING: And, Derek, obviously we --  
10 we reserve all rights and with respect to the issue 09:51:44  
11 you raised and we're happy to discuss that with you  
12 off the record at a later time.

13 One housekeeping item is, I would suggest  
14 that the witness be given 45 days to review his  
15 testimony. I think that's what we've been doing 09:52:00  
16 for the most part in the case --

17 SPECIAL MASTER GARRIE: 30 days.

18 MR. SCHWING: -- provide any corrections.

19 SPECIAL MASTER GARRIE: I think Gibson  
20 requested 30 days. 09:52:11

21 MR. SCHWING: Well, Special Master  
22 Garrie, I think we actually were using 45. The  
23 last time I got on with Mr. Cross I said 30 days  
24 because I was the new guy, and didn't realize what  
25 we had been doing. 09:52:21

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1 SPECIAL MASTER GARRIE: Is that in the 09:52:22  
2 protocol? There was an explicit request in the  
3 protocol. I can't remember what it is.

4 MR. SCHWING: Yeah.

5 SPECIAL MASTER GARRIE: But I know you 09:52:28  
6 added specific language for that request, so  
7 whatever it is -- it is.

8 MR. LOESER: We can go off the record and  
9 we can --

10 MR. SCHWING: Yeah, and the other -- 09:52:36  
11 well, before we go off the record -- we're still on  
12 the record, right?

13 SPECIAL MASTER GARRIE: Still on the  
14 record.

15 MR. SCHWING: The testimony and documents 09:52:46  
16 should -- the testimony should be treated as  
17 "Highly Confidential" and we'll be obviously  
18 reviewing the testimony and making appropriate  
19 designations.

20 MR. LOESER: Understood. 09:52:58  
21 Okay. Let's go off the record.

22 THE VIDEOGRAPHER: Okay. We're off the  
23 record. It's 9:53 p.m.

24 (TIME NOTED: 9:53 p.m.)

25 ---o0o--- 09:53:06



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1 I, SIMON CROSS, do hereby declare under  
2 penalty of perjury that I have read the foregoing  
3 transcript; that I have made any corrections as  
4 appear notes; that my testimony as contained  
5 herein, as corrected, is true and correct.

6 Executed this \_\_\_\_ day of \_\_\_\_\_,  
7 2022, at \_\_\_\_\_, \_\_\_\_\_.

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11 \_\_\_\_\_  
12 SIMON CROSS

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1 I, Rebecca L. Romano, a Registered  
2 Professional Reporter, Certified Shorthand  
3 Reporter, Certified Court Reporter, do hereby  
4 certify:

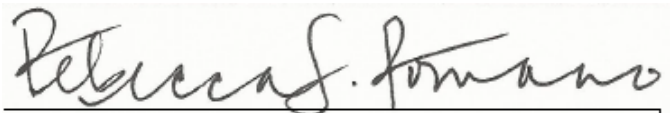
5 That the foregoing proceedings were taken  
6 before me remotely at the time and place herein set  
7 forth; that any deponents in the foregoing  
8 proceedings, prior to testifying, were administered  
9 an oath; that a record of the proceedings was made  
10 by me using machine shorthand which was thereafter  
11 transcribed under my direction; that the foregoing  
12 transcript is true record of the testimony given.

13 Further, that if the foregoing pertains to the  
14 original transcript of a deposition in a Federal  
15 Case, before completion of the proceedings, review  
16 of the transcript [X] was [ ] was not requested.

17 I further certify I am neither financially  
18 interested in the action nor a relative or employee  
19 of any attorney or any party to this action.

20 IN WITNESS WHEREOF, I have this date  
21 subscribed my name.

22  
23 Dated: June 24, 2022

A handwritten signature in cursive script, reading "Rebecca L. Romano", is written over a horizontal line.

Rebecca L. Romano, RPR, CCR

24  
25 CSR. No 12546

SIMON CROSS

si@fb.com

June 24, 2022

RE: In Re: Facebook, Inc. Consumer Privacy User Profile  
Litigation

June 21, 2022-SIMON CROSS 30(B)(6)-Volume 5-5291734

The above-referenced transcript has been  
completed by Veritext Legal Solutions and  
review of the transcript is being handled as follows:

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Contact Veritext  
to schedule a time to review the original transcript at  
a Veritext office.

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Locked .PDF  
Transcript - The witness should review the transcript and  
make any necessary corrections on the errata pages included  
below, notating the page and line number of the corrections.  
The witness should then sign and date the errata and penalty  
of perjury pages and return the completed pages to all  
appearing counsel within the period of time determined at  
the deposition or provided by the Code of Civil Procedure.

\_\_\_ Waiving the CA Code of Civil Procedure per Stipulation of  
Counsel - Original transcript to be released for signature  
as determined at the deposition.

\_\_\_ Signature Waived - Reading & Signature was waived at the  
time of the deposition.

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1    \_X\_ Federal R&S Requested (FRCP 30(e)(1)(B)) - Locked .PDF

2           Transcript - The witness should review the transcript and  
3           make any necessary corrections on the errata pages included  
4           below, notating the page and line number of the corrections.  
5           The witness should then sign and date the errata and penalty  
6           of perjury pages and return the completed pages to all  
7           appearing counsel within the period of time determined at  
8           the deposition or provided by the Federal Rules.

9    \_\_ Federal R&S Not Requested - Reading & Signature was not  
10           requested before the completion of the deposition.

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In Re: Facebook, Inc. Consumer Privacy User Profile  
Litigation

SIMON CROSS 30(B)(6)-Volume 5-5291734

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WITNESS \_\_\_\_\_ Date \_\_\_\_\_

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**[corrections - data]**

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[exhibit - facebook]

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**[facebook - finished]**

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[low - means]

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[right - schwing]

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## [understanding - version]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS  
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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